Schools' responses to Covid-19

The challenges facing schools and pupils in September 2020

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NFER
National Foundation for Educational Research

Nuffield Foundation

Contents

Acknowledgments

This report is part of a larger research project focusing on schools' responses to Covid-19. The NFER team would like to thank everyone who commented on the priority themes for this part of the work. We are particularly grateful to all participating senior leaders and teachers for their time in completing the surveys. We are also thankful to the huge team of NFER staff who contributed to the survey, statistical analysis and report production. Particular thanks are due to Simon Rutt, lead statistician and to Kathryn Hurd and her survey administration team.

The NFER team would also like to thank the Nuffield Foundation for co-funding this research with NFER.

The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in education, welfare, and justice. It also funds student programmes that provide opportunities for young people to develop skills in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics and the Ada Lovelace Institute. The Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation. Visit https://www.nuffieldfoundation.org/

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Executive summary

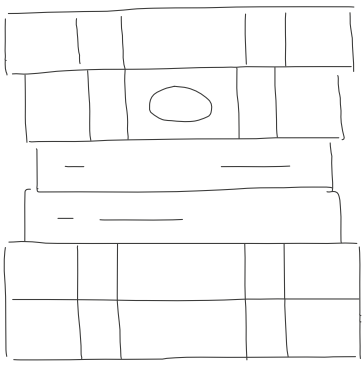
The Covid-19 pandemic continues to impact on all areas of society, including education. On 20 March 2020, schools closed their gates to all pupils apart from vulnerable pupils and children of keyworkers. In June, primary schools opened to selected year groups (Nursery, Reception, Year 1 and Year 6) and secondary schools invited pupils in Years 10 and 12 to have at least some face-to-face contact with their teachers. On 23 June, the Prime Minister confirmed that primary and secondary schools in England would return with full attendance in September (Danechi and Roberts, 2020). The Government (DfE, 2020e) acknowledged the challenge of achieving a balance between the priority of fully opening schools and controlling the spread of the Covid-19 virus. Schools are asked to ensure high standards of hygiene (for example through regular hand sanitising, deep cleaning and avoiding pupils sharing equipment). They are also asked to promote social distancing as far as possible (for example by splitting classes into smaller groups and keeping these separate from one other, and by separating year groups, reducing movement around the school, arranging desks in forward-facing rows, asking staff to socially distance and minimising the number of staff working with each group).

This research investigates the impact of Covid-19 on mainstream primary and secondary schools in England. It follows an earlier NFER survey of schools' responses to Covid-19 in May (see Nelson and Sharp, 2020) and focuses on the challenges schools will face from September. It considers the extent to which pupils are behind in their curriculum learning in relation to teachers' normal expectations for the end of the school year; the impact of Covid-19 on the 'disadvantage gap'; the need for catch-up support from September; and the logistical issues and resource implications of opening schools fully while taking measures to reduce the risk of infection. It also considers schools' experiences of offering remote learning from March, and blended learning (remotely and in-school) from June, in order to inform decisions about the support and resources that schools will need in the event of future lockdowns.

Findings

Pupils' learning during Covid-19 and the need for catch up

- Nearly all teachers (98 per cent) report that their pupils are behind where they would normally expect them to be in their curriculum learning at the end of the 2019/20 school year.
- Teachers estimate that their pupils are three months behind, on average. The majority (78 per cent) see no difference between girls and boys in this respect, but 21 per cent say that boys have fallen further behind normal expectations than girls[1].
- Teachers report covering, on average, only 66 per cent of the usual curriculum during the 2019/20 school year.
- Over half (61 per cent) of teachers report that the learning gap between disadvantaged pupils and their peers has widened since the previous year, with the remainder judging that the 'disadvantaged learning gap' had remained the same (32 per cent) or reduced (seven per cent). Based on teacher estimates, on average, the gap between disadvantaged pupils and their peers had increased by 46 per cent. There is a wide range of uncertainty around this estimate, and it is likely to be an underestimate, as differences between schools may have also contributed to changes in the disadvantaged learning gap.
- Teachers in the most deprived schools are over three times more likely to report that their pupils are four months or more behind in their curriculum-related learning in July, compared to teachers in the least deprived schools (53 per cent compared to 15 per cent).



1 The remaining one per cent of teachers report that girls have fallen further behind normal expectations than boys.

Why are pupils falling behind?

- Importantly, the reasons for pupils falling behind are not entirely due to school closure, schools' remote learning offer or pupils' engagement with it, but also about limitations on the quality of pedagogy when schools reopened. The negative impact of social distancing requirements on teaching practice is noted below. Failure to address this when schools reopen in September may lead to pupils falling further behind in their learning.
- The majority of pupils were expected to learn at home throughout the summer term, but pupil engagement in remote learning in July was low, with teachers reporting that only 38 per cent of pupils returned their last piece of set work in June/ July. Parental engagement, which is critical to the engagement of pupils - especially those of primary school age, was also comparatively low, at 44 per cent.
- In the second half of the summer term, schools invited certain year groups to return. However, senior leaders reported only 56 per cent of the pupils eligible to attend actually did[2]. Attendance was lower among pupils eligible for the Pupil Premium (45 per cent) and those from Black, Asian and Minority Ethnic (BAME) backgrounds (49 per cent).
- Parents' safety concerns were keeping children away from school. According to senior leaders, a key reason for non-attendance was parents thinking it was not safe to send their children to school (32 per cent of senior leaders indicated this was a common reason for non-attendance). Leaders in schools with high proportions of pupils from BAME backgrounds were more likely to report parents having safety concerns than schools with no BAME pupils (65 compared to 35 per cent). This may reflect medical evidence suggesting that individuals from BAME backgrounds are at higher risk from Covid-19 (PHE, 2020).
- Parental fines for children's absence are being reintroduced from September. However, consideration needs to be given to the types of families who are most likely to keep their children away from school (low income and BAME families), and whether fines are the most appropriate mechanism to support their children's return to school.
- The quality of in-school teaching was also impacted by Covid-19. Almost three-quarters of teachers (74 per cent) did not feel able to teach to their usual standard under the regulations that were in force in July. In an open-response question, almost half said that distancing requirements had negatively impacted their teaching practices. They were no longer able to utilise core elements of their teaching practices such as group work and practical work, nor did they feel able to move around the classroom to teach, support and interact with their pupils effectively. Similarly, two-fifths of teachers (40 per cent) reported that they no longer had access to their usual resources such as equipment and learning materials. Teachers also highlighted the difficulties caused by pupils not being able to share resources, as they would usually do.
- Social distancing requirements resulted in over half of senior leaders (51 per cent) reporting that they were using teaching assistants (TAs) to lead classes as a way of managing the supervision of smaller classes, and 46 per cent of teachers said that they were mainly teaching pupils they did not usually teach.

Recovering learning from September

- Teachers estimate that 44 per cent of their pupils are in need of intensive catch-up support (over and above normal expectations for this type of support). Teachers' estimates are 25 percentage points higher in the most deprived schools, compared to the least deprived schools. They are also significantly higher (by 18 percentage points) in schools serving the highest proportion of pupils from BAME backgrounds, and this relationship persists after controlling for the effects of deprivation (i.e. the percentage of pupils eligible for free school meals (FSM)).
- Senior leaders' top priorities for September are to provide support for pupils' emotional and mental health and well-being (81 per cent); to re-engage pupils with learning (64 per cent); and to settle them into school (63 per cent). It is understandable that senior leaders feel the need to focus on these 'basics' following, in many cases, almost six months out of school. The catch-up effort in schools is therefore likely to start later in the autumn term and will be a 'long game' rather than a 'quick fix'.

2 The DfE estimated (2020b) that, among primary schools open to at least one key transition year group, at the end of term, daily attendance rates were at 49 per cent for Year 6 pupils, 40 per cent for Year 1 pupils, and 42 per cent for pupils in Reception. Among secondary schools open to key year groups, the DfE estimated that daily attendance rates for Year 10 and Year 12 were 15 per cent and 14 per cent respectively.

- At this early stage, most teachers expect to be using informal methods to identify pupils' curriculum learning gaps and catch-up needs in September. They plan to create time in the school day for small-group or one-to-one sessions to support pupils with the greatest need, in the main using interventions recommended by other teachers.
- In July, approximately two in five senior leaders had firm intentions to access the Government's £350 million National Tutoring Programme (NTP) for disadvantaged pupils. The main barrier for those who were undecided was a concern about using tutors who were unfamiliar to their pupils.

Opening schools safely and supporting the workforce

- Opening schools while Covid-19 remains a threat poses considerable challenges for school leaders, despite the Government's lessening of the strict two-metre social distancing rule imposed in June, to allow schools to create year-group 'bubbles'. While most senior leaders (89 per cent) predict that they will find it at least 'somewhat manageable' to open to all pupils while taking measures to minimise the risk of infection, many identify a need for additional staffing and resources.
- Among the 78 per cent of senior leaders who have concerns about the manageability of opening their schools under these circumstances (those who said it was 'somewhat manageable' or 'completely unmanageable'), additional needs identified included more teachers, TAs, cleaning staff, support staff, and funding for additional cleaning and protective equipment and for IT. For this group of senior leaders, the cost of additional staffing and resource needs represent an increase in total expenditure of approximately one-fifth for an average primary and one-tenth for an average secondary school, although some of the costs associated with these additional needs will be met by government schemes[3].
- Senior leaders and teachers want the Government to provide more funding and clear, detailed and consistent guidance to help them manage the situation.
- One result of the pandemic is an apparent increase in potential teacher retention. The percentage of teachers and senior leaders intending to leave the profession has reduced by more than half compared to previous estimates (NFER, 2019). If retention were to improve to this extent, it would more than compensate for previous teacher shortages and could help to address some of the additional Covid-related staffing needs – though certain skills shortages may remain. On the other hand, schools plan to reduce their initial teacher training (ITT) placements in 2020/21 by an average of 0.6 trainees in primary schools (20 per cent reduction) and 0.5 trainees in secondary schools (seven per cent reduction). This is of concern, given the large increase in the number of applications for ITT in 2020 (UCAS, 2020).

Preparing for a 'Plan B' in case of further outbreaks of Covid-19

The period of partial school opening in June and July provides useful learning in case of another outbreak or local lockdowns and the need to return to a remote, or blended, learning model. The government guidance to schools on opening in September (DfE, 2020e) includes a requirement to devise a remote learning plan by the end of September in case of further school closures.

- Although the majority of pupils were at home in June and July, the majority of senior leaders focused their staffing on in-school provision. In primary schools, 50 per cent of all pupils were in school for some of the time, but only 6 per cent of senior leaders said their staffing was focused on remote learning provision. Leaders in secondary schools reported that 31 per cent of all their pupils were spending some of their time in school, but only 38 per cent were focusing their staffing on remote learning provision. Senior leaders needed to deploy more of their staff to in-school provision due to the additional demands of split classes and social distancing. This raises a concern about a lack of learning equity for pupils who were at home during the summer term.
- Evidence on distance learning highlights the importance of interactive learning, consolidating learning and supporting pupils to self-regulate their learning as effective strategies as part of a mixed diet of provision (EEF, 2020e). However, by July 2020, teachers were no more likely to be offering interactive teaching methods than earlier in lockdown.
- Although many schools were supplying IT equipment to their staff, over a third of teachers

3 Please note that this finding is not generalisable to all schools as it is based on the subset of senior leaders who had concerns about the manageability of opening their schools and were able to provide estimates of their resource needs. Further, some of the additional staffing and resources that senior leaders estimate they need may be desirable, rather than essential.

(35 per cent) were providing their own laptop or computer, and three-fifths either supplied their own camera/video equipment (41 per cent) or had no access to this at all (21 per cent). Additionally, senior leaders report that 28 per cent of pupils have limited access to IT at home – a similar level to our survey in May. This was a particular issue for schools serving the most deprived pupil populations, making remote learning more challenging for those in the greatest need.

- There is a need for additional IT equipment to ensure that all schools can communicate effectively with pupils, staff and parents. The Government's decision (DfE 2020e) to allow schools which have to close due to local lockdown to apply to the DfE for laptops and other IT for disadvantaged children in Years 3 to 11, who need to study at home, is particularly welcome.

Implications for government, schools and those that support them

Our research identifies a number of issues that will require a rapid and timely response when schools open in September.

1. **Parents will need reassurance that schools are safe.** In July, only just over half the children invited back to school attended. Parents clearly had concerns regarding the safety of schools, with more concern in communities serving high proportions of disadvantaged and BAME pupils. The Government's planned national advertising campaign (Cowburn and Devlin, 2020) is welcome. It will need to be clear and convincing and may need to continue through the autumn in order to assuage current levels of parental concern.

2. **Schools may need help with the management of non-attending pupils.** Schools will be in a difficult position in September with regard to issuing financial penalties for non-attendance. This will be especially the case if they have large numbers of families who choose to keep their children away from school, and if they cannot convince parents that their school is Covid-secure. Contacting and liaising with these families could be a large and time-consuming task at a time when schools will be managing many other complex issues. They may therefore need direct support from local authorities (LAs) and trusts to increase attendance.

3. **While the Government's additional funding for catch-up support is welcome, schools need extra resources to manage the demands of Covid-19.** This is particularly true for additional cleaning and sanitising regimes, whilst additional staff are likely to be required to ensure social distancing is managed appropriately.

4. **The Government needs to work with school leaders and ITT providers to explore how to tackle the challenges resulting from an increase in ITT applications, coupled with a reduction in training places in schools.** NFER will be investigating this issue further and plan to publish more detailed findings later in the autumn term.

5. **When inspections resume, Ofsted may need to modify expectations of schools providing a broad and balanced curriculum while social distancing is in force.** However hard schools try to cover the full curriculum in the next academic year, their efforts are likely to be limited by social distancing. Secondary schools, in particular, may need to reorganise their way of working, with teachers moving between pupils, rather than pupils moving between teachers, which means that they will not have access to their usual workspaces or resources. Added to this, the quality of teaching and learning is likely to be affected by within-class social distancing. Teachers are encouraged to keep their distance from pupils, to stay at the front of the classroom and not to move around the class, which will prevent them from carrying out usual pedagogical practices such as providing feedback or differentiated support. Pupils are encouraged to face the front (not each other), which is also likely to impact on group work and other forms of peer-to-peer learning.

6. **Catch up needs to be treated as a long-term endeavour rather than a 'quick fix'.** Respondents to our survey identified a conflict between maintaining social distancing, achieving full curriculum coverage and ensuring high-quality teaching and learning. These factors are likely to impact on the quality of pupils' education and may slow the pace of curriculum learning among pupils in the autumn. We should not assume that pupils will immediately begin to recover missed learning, or to forge straight ahead with their curriculum, when they return to school in September. With the exception of pupils working towards examination specifications, catch up should be seen as part of the ongoing process of learning recovery for most pupils rather than as a quick-turnaround solution. It is encouraging that the Government is providing

funding to schools for catch up and offering support through the National Tutoring Programme (NTP) for disadvantaged pupils. However, at the moment, most senior leaders are not sure they will access the NTP and have reservations about the quality of NTP tutors. The Government and NTP providers will need to explain to the profession who the tutors will be and how they will be quality assured.

7. **In future episodes of partial lockdown, 'blended learning' must ensure equity for all pupils.** When schools were asked to open more fully in June, the quality of remote provision, and engagement with it, reduced compared to earlier in lockdown. Staffing was skewed towards in-school provision at this time to meet the demands of social distancing, leaving pupils based at home with less attention from their teachers. In future periods of blended learning, properly-resourced remote learning needs to be coupled with high-quality in-school teaching for vulnerable pupils, children of keyworkers, disadvantaged pupils and pupils with unsuitable home learning environments (rather than specific year groups).

8. **Schools need more government support to prepare for remote learning in a local lockdown. In particular, they need a clear steer on safeguarding.** The Government (DfE, 2020e) has said that schools must have in place a comprehensive remote learning plan by the end of September, so that they can respond immediately should there be a local or national lockdown. This requirement is challenging and far removed from most schools' current remote learning offer. They are asked to plan for teaching the curriculum through full-day length school sessions, ideally involving contact with teachers. Our research identified that many teachers do not have access to the resources they need to support remote learning from home, nor have they received adequate training to do so, especially in the primary sector. The DfE is planning to make a 'temporary continuity direction' in the autumn term to provide additional clarity to schools about what remote education should be provided. This is critical and needs to be with schools quickly, and certainly in advance of the end of September, or it will not be useful for their planning. It should address these resource and training points and, critically, must provide schools with a clear statement about whether and how live learning can operate while meeting safeguarding guidelines. Without this clarity, many schools will continue to avoid methods involving interactions with pupils. Trusts and LAs will need to be involved in forming this direction.

9. **Schools need to take an evidence-informed approach to preparing for local lockdown.** Our research (Lucas *et al*., 2020) and other sources (EEF, 2020e) have identified a number of strategies that are positively associated with higher levels of pupil engagement and curriculum learning, and a reduced need for catch up. In preparing their remote learning plans, schools should give these consideration. They include: making sure that the school has an effective platform for sharing work with pupils and receiving submitted work, such as a virtual learning environment (VLE); making provision for online lessons, and for interactions between pupils and teachers and between pupils and other pupils; providing activities that involve consolidating learning; using strategies that focus on helping pupils to become independent learners (metacognitive approaches); and engaging with parents, especially in primary schools. Schools should focus on how much is possible (rather than how much they should be constrained) within the limitations of safeguarding guidelines. They will need to work with LAs and trusts to make decisions about how live learning and live video interactions can be made to work. Many schools and trusts have not yet provided sufficient training on remote learning. This should be a priority so that schools are prepared in an event of local lockdown.

10. **In the event of a local lockdown, the dispatch of laptops will need to be rapid**. It is encouraging that the Government is offering laptop and hotspot provision to cover disadvantaged pupils in Years 3-11 and clinically vulnerable pupils in all year groups. This will make plans for high-quality remote learning more feasible. However, the system of schools applying direct to the DfE for this support must result in a much swifter dispatch of devices than under the previous scheme, which operated via LAs and trusts. Schools will be able to apply for these devices as they go into lockdown so, if their remote learning plan is to be offered effectively from day one, the dispatch of laptops will have to be almost instantaneous. Planning – and the training needed for teachers – should be undertaken now so that the system operates as efficiently as possible when the need arises.

1 Introduction

The Covid-19 pandemic continues to impact on all areas of society, including education. On 20 March 2020, schools closed their gates to all pupils apart from vulnerable pupils and the children of keyworkers. On 1 June, primary schools opened to selected year groups (Nursery, Reception, Year 1 and Year 6) and, from 15 June, secondary schools invited pupils in Years 10 and 12 to have at least some face-to-face contact with their teachers (DfE, 2020a; Prime Minister's Office and Johnson, 2020). On 23 June, the Prime Minister confirmed that primary and secondary schools in England would return with full attendance in September (Danechi and Roberts, 2020).

The Data Evaluation and Learning for Viral Epidemics Initiative (Royal Society DELVE Initiative, 2020) considered a range of evidence, concluding that keeping schools open is critical to avoid a negative impact on young people's skills, mental and physical health and safety, as well as the likely reduction in their longer-term earnings potential. It noted that the limited evidence on the Covid-19 infection rate from school opening suggested that the risk from opening schools is relatively low, compared to the risk of restarting many other activities. On the other hand, keeping schools open is the key to unlocking the rest of the economy, allowing parents to return to work.

This broader social and economic point was also made by the DfE (2020e) in its guidance, which noted that the full opening of schools would be an important move back towards normal life for many families. The Children's Commissioner (2020a) asserted that education should be prioritised over other sectors stating: 'When only a limited amount of social interaction is feasible, the amount accounted for by education must be protected – at the expense of other sectors/activities' (p.1). She also called for regular widespread testing of pupils and teachers coupled with an effective tracking system in the case of positive tests, focused on keeping schools safe.

The Government has acknowledged the challenge of achieving a balance between the priority of fully opening schools and controlling the spread of the Covid-19 virus. Indeed, balancing these priorities is a theme throughout the most recent Department for Education guidance (DfE, 2020e), which attempts to provide clarity for schools around how they should operate from September. Key features of the guidance are outlined below.

1.1 Space, movement and cleaning considerations

As far as possible, schools are asked to maintain a level of social distancing when pupils return in September. Acknowledging that the layout of many school buildings, when full, will make this difficult, schools are advised to teach pupils in bubbles that are year-group size, class size, or smaller where that is possible. There should be two-metre distancing between staff, and between staff and pupils. Where possible and appropriate, schools are advised to encourage pupils to maintain a distance from each other, and pupil mixing between bubbles should be minimised. Schools are also asked to consider staggering start, finish and break times to avoid pupils mixing.

Schools face particular challenges in relation to managing pupils who travel by school or public transport and in relation to wrap-around provision such as before- and after-school clubs. The guidance recommends that similar arrangements should be made in these contexts to those in school – i.e. pupils should board buses in an orderly fashion and sit with other pupils from their 'bubble' on board, while childcare settings should avoid pupils mixing between bubbles where possible. Given the space restrictions within these contexts, not to mention the freedom that pupils have to embark on their morning bus journey to school as they wish, these guidelines are likely to be challenging to implement and supervise.

There is a requirement for additional cleaning and sanitation in schools to control the risk of infection. School leaders are expected to ensure more regular cleaning of the school site, cleansing of shared equipment, both within and between bubbles, and regular surface cleaning. Pupils should be guided to wash their hands regularly, and schools will need to put in place more sanitising stations. Younger children are likely to need regular handwashing supervision.

1.2 Curriculum, and teaching and learning

The Government expects schools to offer a broad and balanced curriculum to all pupils in September. There is recognition that there will be a need for teachers to identify 'learning gaps' and put catch-up measures in place. For Key Stages 1 and 2, schools are asked to focus on the essentials – phonics, reading, writing and mathematics. For Key Stage 3, gaps in English and

mathematics are likely to need addressing, especially among Year 7 pupils, but otherwise, schools are asked to offer the full range of National Curriculum subjects. Key Stage 4 pupils are expected to need more intensive catch-up support as they are following examination specifications. In exceptional circumstances, Year 11 students may discontinue a subject to give them more time to master their other subjects, following consultation with parents. Key Stage 5 pupils will need catch-up support, but there is an expectation that they will have coped better than other pupils with independent learning during lockdown.

In terms of classroom layout, schools are required, where possible, to sit pupils at desks facing the front of the class (and not each other). Unnecessary furniture is to be removed from classrooms to allow for greater spacing between desks, and teachers are advised not to walk around their classrooms, or to get close to pupils, where this can be avoided. They are to maintain two-metre distancing from their pupils as far as possible.

Guidance on the use of shared resources and equipment provided by DfE in August (2020e) stated that schools should ensure that individual and frequently used items (e.g. pens and pencils) are not shared, and that resources that may be shared within or across classes or bubbles (e.g. games and science equipment) are cleaned regularly and meticulously.

1.3 Attendance

In June and July 2020 attendance among pupils invited to return to school was voluntary. From September 2020, pupil attendance in school will be mandatory and schools are expected to enforce attendance. The only exemptions are those that are self-isolating or under the care of a clinician. As shielding for clinically vulnerable groups came to an end on 1 August, and as the prevalence of Covid-19 in the community has reduced[4], children who were previously shielding are not exempt from attendance, unless their health practitioner says that they must not attend. The same applies to school staff who were previously shielding. Children with characteristics that make them more vulnerable to Covid-19, for example, pupils from a Black, Asian or Minority Ethnic (BAME) background also have no exemption. In instances where parents are reluctant to send their children to school, the DfE guidance (2020f) states:

> *[…] we recommend schools discuss their concerns and provide reassurance of the measures they are putting in place to reduce the risk in school. Schools should be clear with parents that pupils of compulsory school age must be in school […]*

The DfE guidance does acknowledge the challenges that these measures will bring for schools, advising them to follow most of them 'where possible'. Many schools may have to make a judgement about how to balance social distancing while offering a full curriculum.

1.4 Preparing for local lockdown

The DfE (2020e) has asked schools to have plans in place, by the end of September, for future waves of local lockdown. The guidance states:

> *[…] we expect schools to have the capacity to offer immediate remote education. Schools are expected to consider how to continue to improve the quality of their existing offer and have a strong contingency plan in place for remote education provision by the end of September.*

Schools are also asked to plan for teaching the full curriculum remotely in a planned and sequenced manner, ideally with direct teaching by school teachers or through high-quality curriculum resources and/or videos. Teachers are expected to use assessment for learning approaches to check pupils' progress and to set clear expectations about the submission of work and feedback. Schools are asked to: '[…] plan a programme that is of equivalent length to the core teaching pupils would receive in school, ideally including daily contact with teachers'. The DfE is also planning to make a 'temporary continuity direction' in the autumn term, to provide additional clarity to schools about what remote education should be provided. The DfE guidance (2020f) specifies that there will be consultation with the education sector before a final decision is made on this.

Evidence from NFER's Wave 1 survey (Lucas *et al*., 2020) showed that a key challenge for remote learning was a lack of pupil access to IT in the home. Other research identified that the Government's earlier digital access scheme for disadvantaged Year 10 and vulnerable pupils had only limited success (EPI, 2020). The Government is now committing to providing digital access to a much broader range of pupils in 2020/21, in incidences of local lockdown. Previously, the scheme operated through LAs and academy trusts. This time, laptops and tablets will be distributed directly to schools affected by a local outbreak (DfE, 2020d; DfE, 2020e). Devices will be available for disadvantaged pupils in Years 3 to 11 and for clinically extremely vulnerable

4 The reproduction or 'R' rate of the virus fell below one per cent in June 2020.

children from all year groups who are unable to attend school. The DfE is also working in partnership with British Telecom (BT) and other telecommunications companies to offer free access to BT WiFi hotspots for disadvantaged pupils and to provide access to free additional data to families who rely on a mobile internet connection.

1.5 This research

Our research was designed to investigate the impact of Covid-19 on mainstream primary and secondary schools in England in order to inform planning and preparation for September and beyond. NFER's first survey of schools' responses to Covid-19 took place in May, and our findings identified some of the challenges schools faced in making the education environment operate efficiently and effectively. Sharp *et al*., (2020) identified, for example, the complexity of the challenge facing senior leaders as they prepared to open their schools more fully in June, while Nelson and Sharp (2020) identified the implications of schools' reduced teaching capacity during Covid-19, meaning that more resources were required to enable schools to provide effective in-school and remote learning activities simultaneously.

Our second survey focused on gaining insight into the scale and nature of the challenges schools will face from September, and schools' plans for addressing these, by exploring both their experiences in June and July, and their plans for the 2020/21 school year.

Chapter 2 of this report focuses on the impact that lockdown has had on **pupils' learning**, including differential impacts between disadvantaged and other pupils. It considers the extent of the perceived 'catch up' needed, and the factors contributing to curriculum learning loss.

Chapter 3 takes a **forward-looking focus**, reporting what senior leaders and teachers told us about their plans and concerns for September. It focuses on both operational and learning-related factors. Operational factors include schools' reactions to the Government's plans for opening schools fully in September, including resource considerations, teacher recruitment and retention patterns, and plans for supporting initial teacher training (ITT) placements. Learning-related factors include schools' plans for supporting pupils on their return in September, including both their welfare and academic catch-up needs. It concludes by reflecting on the period of partial school opening in June and July (in which some pupils were learning in school while others were learning remotely), exploring the quality of learning provision during this time. It outlines the challenges that future waves of full or partial lockdown may bring and the plans that should be put in place to ensure all pupils are well supported in this scenario.

Appendix A contains details about the sample weighting, Appendix B contains information about our basis for estimating the financial impact of Covid-19 on schools, and Appendix C outlines the regression analyses undertaken.

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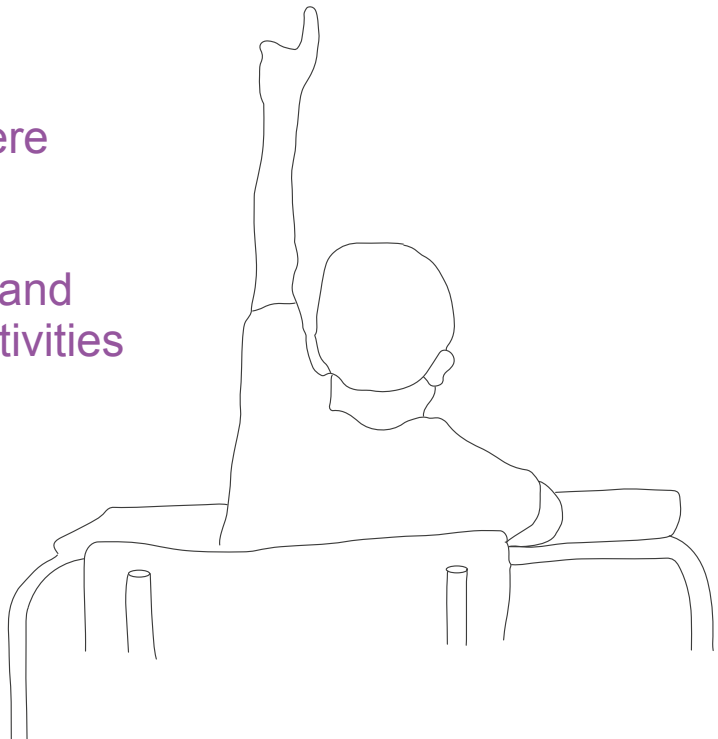


Box 1. NFER's second survey of schools' responses to Covid-19

Sample

From 8 to 15 July 2020, NFER collected data via a survey sent to all 20,553 state-funded mainstream primary and secondary schools in England. We asked senior leaders (head teachers, principals, deputy head teachers and business managers) to complete the survey themselves and pass it on to up to nine teachers of different key stages (primary schools), or different subject areas (secondary schools). We received responses from 1176 senior leaders and 1782 teachers in 1305 primary schools (including middle deemed primary) and 898 secondary schools (including middle deemed secondary and all-through schools), representing 7.6 per cent of the 17,169 primary schools and 26.5 per cent of the 3384 secondary schools in England. We weighted the data to ensure that our findings are representative of mainstream schools in England. A few schools provided more than the requested number of responses, which was also addressed by weighting the data.

Data collected

The survey focused on four main areas: the extent to which pupils were behind in their learning, compared to where they would normally be at the same time of the year; schools' provision during summer term 2020; schools' approaches to catch up; and staffing issues and plans for the future. The survey also asked respondents for some information about themselves, including their job role, gender and age.

Analysis

The NFER team used DfE administrative data to identify the characteristics of each school, including phase, proportion of pupils eligible for free school meals (FSM), school type (local authority or academy), and region. Weighting used the distribution of the achieved sample relative to the national population of school phase and FSM quintile. Weightings were adjusted to account for the number of responses per school.

The analysis used three main approaches: descriptive statistics for all of the survey questions; tests of statistical significance to identify associations between selected questions and school characteristics; and regression models for the factors associated with pupils falling behind in their curriculum learning and the percentage of pupils requiring intensive catch-up support. Results were considered statistically significant if the probability of a result occurring by chance was less than five per cent ($p = < 0.05$).

Reports

This research builds on the following reports based on a survey of schools' responses to Covid-19 conducted in May 2020, available from the NFER website:

1. Returning pupils to school
2. Pupil engagement in remote learning
3. Support for vulnerable pupils and the children of keyworkers
4. Job satisfaction and workload of teachers and senior leaders
5. Key findings from the Wave 1 survey
6. Technical report.

2 Pupils' learning during Covid-19 and the need for catch up

Key findings

- In July, nearly all teachers (98 per cent) estimated that their pupils were behind in their curriculum learning compared to where they would normally expect them to be, by an average of around three months. Over 20 per cent of teachers reported that boys had fallen further behind than girls.
- Factors associated with lower estimates of curriculum learning loss included teachers setting tasks involving collaborative working between pupils, and schools experiencing higher parental engagement. Factors associated with higher estimates of curriculum learning loss included teachers not having received training in remote learning support, and teachers feeling unable to teach at their normal standard.
- The curriculum learning gap between disadvantaged pupils and their peers has increased by 46 per cent compared with July 2019.
- On average, primary teachers estimated their pupils were further behind normal expectations (by three months on average) than secondary pupils (whose teachers estimated that they were two-and-a-half months behind). Pupils in deprived schools appear to have fallen further behind than pupils in more affluent schools. Over half (53 per cent) of teachers in the most deprived schools reported pupils were four months or more behind, compared to 15 per cent of teachers in the least deprived schools.
- There was a high level of catch-up need across all pupils in all schools. Teachers estimated that just under half of pupils (44 per cent) were in need of intensive catch-up support. Teachers in the most deprived schools identified significantly more of their pupils in need of such support (57 compared to 32 per cent in the least deprived schools). This highlights the high level of intensive catch-up support that schools will need to provide in the next academic year.
- In July, only 56 per cent of pupils in the eligible year groups were attending school. Pupil attendance was lower among pupils eligible for the Pupil Premium (45 per cent) and those from BAME backgrounds (49 per cent). Pupils in the most deprived schools had lower levels of attendance (45 per cent) than pupils in the least deprived schools (70 per cent).
- A key reason for non-attendance was parents thinking it was not safe to send their children to school (32 per cent of senior leaders said this was the case to a great extent). Senior leaders from schools with high proportions of pupils from a BAME background were more likely to report this being the case to a great extent than those in schools with no BAME pupils (65 compared to 35 per cent).
- Senior leaders reported that they had the majority of their full-time equivalent (FTE) teaching staff available to work in July (92 per cent). However, the majority of those teachers working in school did not feel able to teach to their usual standard (74 per cent). The challenge of teaching under conditions of social distancing was the main reason for this.

2.1 Introduction

This chapter sets out the nature and extent of the challenges facing schools as a result of Covid-19. It reports teachers' estimates of the extent to which pupils were behind in their curriculum learning compared with where teachers would expect them to be at the end of the 2019/20 school year. It outlines similarities and differences between groups. It also considers the reasons that may contribute to pupils being behind, including the extent of teachers' curriculum coverage, pupils' engagement with remote learning, and teaching quality. The chapter outlines what schools have already done to address the perceived need for catch up and to support pupils' return to school.

2.2 To what extent have pupils fallen behind as a result of Covid-19?

Since March, the majority of English pupils have spent significant amounts of time out of school, in common with children and young people around the world. Most of these pupils were supported and taught remotely, but there is a concern that they have fallen behind where they would have otherwise been, and will need substantial catch-up support. While there is no doubt that Covid-19 has significantly impacted on pupils' learning, little is currently known about the scale of this challenge.

Given that the circumstances of Covid-19 have been unique, the current evidence on the potential effects of school closures relies on comparisons with other types of variation in the amount of schooling received, such as teacher strikes, weather extremes and the effects of the long school break over the summer. In July, we asked teachers to estimate the extent to which pupils were behind in their curriculum learning, compared to where they would normally be expected to be at this time in the school year. We supplied teachers with a definition of curriculum learning to ensure that all respondents were addressing the same concept. We asked them to think about all their pupils – those attending school, and those based at home:

> *By curriculum learning, we mean the knowledge and skills that pupils are expected to acquire through the curriculum, including specific learning standards or objectives that they are expected to meet.*

We have not attempted to estimate other forms of learning or skills that may have been acquired or lost during lockdown, including non-cognitive factors such as resilience or well-being.

The most robust studies estimate that missed opportunities to engage with the curriculum have led to a reduction in test scores of between six and ten per cent of a standard deviation, which is equivalent to between one and two months of progress (Royal Society DELVE Initiative, 2020; EEF, 2020c). These impacts may have been offset to some extent by learning at home and the provision of remote schooling, but there are likely to be large differences between pupils. Indeed, as documented in a previous report in this series (Lucas *et al.*, 2020), there has been wide variation in the quantity and quality of remote learning support provided by schools and the extent of pupil engagement with it.

This study used teachers' estimates to provide an indication of the extent to which Covid-19 has contributed to pupils falling behind, and the degree to which different pupils and schools have been affected. We have analysed the answers to all survey questions according to phase (primary/ secondary) and deprivation (proportion of children eligible for free school meals (FSM)), but have only reported differences where these are statistically significant at the five per cent level ($p < 0.05$)[5]. All percentages are based on the number of people responding to the question, excluding non-responses (valid per cent). In some cases percentages may not sum to 100, due to rounding.

Nearly all teachers (98 per cent) reported that their pupils were behind. On average, teachers estimated that their pupils were around three months behind where they would normally expect them to be.

We asked teachers a series of questions about their pupils' curriculum learning. First, the survey asked them to estimate how far behind their pupils were in their curriculum learning compared to where they would normally expect them to be at 'this time of year' (i.e. in July 2020).

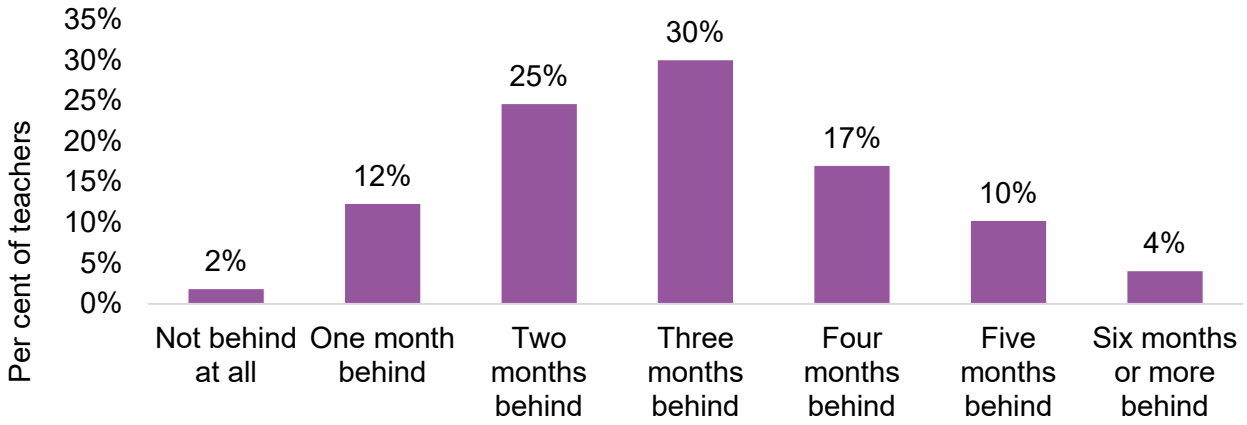
On average, teachers estimated that their pupils were nearly three months[6] behind expectations[7]. As Figure 1 shows, there was a wide range of responses to this question (from two per cent of teachers reporting that their pupils were not behind at all to four per cent of teachers reporting that their pupils were six months behind or more).

5 A Bonferroni adjustment for multiple comparisons (Bonferroni, 1936) was applied where appropriate.

6 On average, pupils were 2.9 months behind expectations according to their teachers. It should be noted that teachers who reported their pupils were six months or more behind were assigned a score of six to calculate this average.

7 Senior leaders were asked similar questions but we do not report their responses in detail because these were comparable to teachers' responses. On average, senior leaders estimated that pupils were 3.2 months behind normal expectations.

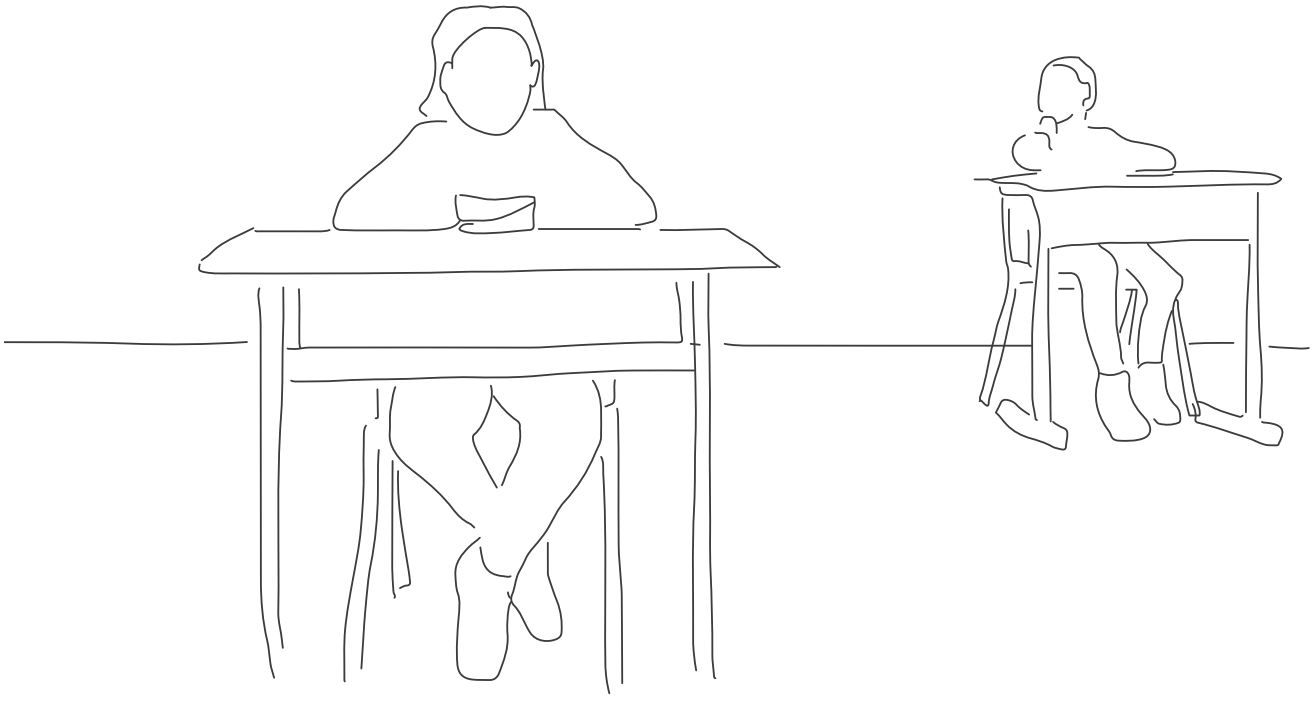
Figure 1: Pupils' curriculum learning compared to normal expectations in July 2020



Source: NFER survey of 1782 classroom teachers: 1489 teachers gave at least one response.

These estimates are not unreasonable given the amount of in-school learning which pupils have missed due to Covid-19. As schools closed to the majority of their pupils on 20 March, most pupils missed between two months and three-and-a-half months of their in-school learning time for the 2019/20 academic year, representing around a third of the school year[8].

Our estimate of reduced curriculum learning is larger than the estimate of one to two months suggested by the Data Evaluation and Learning for Viral Epidemics Initiative (Royal Society DELVE Initiative, 2020). One possible explanation for the difference is that Covid-19 has created a more prolonged disruption to schooling relative to the types of missed schooling that have been studied in previous research. If missed schooling has a multiplicative effect such that the longer the break from learning, the further behind a pupil becomes, then this could explain the difference in estimates. Another possible explanation is that teachers may have given a conservative estimate of pupils' learning based on limited contact with their pupils since March.



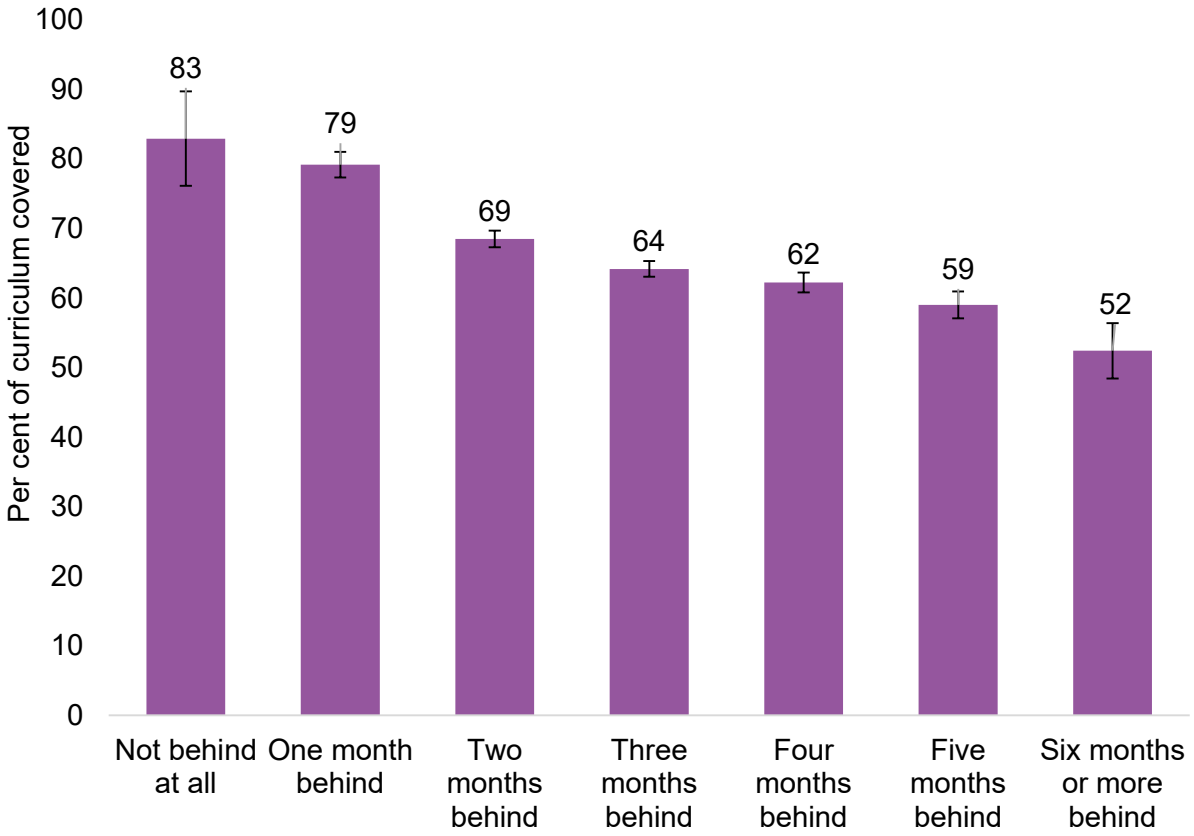
8 Based on children who are not vulnerable or the pupils of keyworkers. The school year typically has 39 weeks (Long, 2019). Pupils who did not return to school between March 20 and 1 June would have missed seven weeks of school, allowing for a two-week Easter holiday and a week for the May half-term. Pupils who did not return to school after March would have missed 14 weeks of school. Some pupils who did return to school in June – for example, in Year 10 and Year 12 – were still predominately learning from home (DfE, 2020a).

There was a strong association between teachers reporting that their pupils were further behind and the amount of the curriculum that teachers had covered. While teachers reported covering 66 per cent of the curriculum on average, this ranged from 52 per cent among teachers who reported that their pupils were six months or more behind to 83 per cent among teachers who reported that their pupils were not behind at all. Very few teachers (six per cent) reported covering more than 90 per cent of the curriculum, with the vast majority (74 per cent) reporting covering between 50 and 79 per cent of the curriculum. This shows that almost all pupils will have missed out on at least ten per cent of curriculum teaching.

2.2.1 Factors influencing the extent of missed curriculum learning

We also established, using regression analysis (see Box 2), that the extent to which pupils had fallen behind in their curriculum-related learning was strongly associated with parental engagement, training provided to teachers by their schools, and teachers' ability to teach at their usual standard.

Figure 2: Average curriculum coverage by extent to which pupils had fallen behind normal expectations



Source: NFER survey of 1782 classroom teachers: 1461 teachers gave at least one response.

Box 2. Which factors are most closely associated with pupils falling behind where teachers would normally expect them to be?

We used regression techniques to examine the association between different variables and how far teachers reported that their pupils had fallen behind, over and above other factors.

Our modelling accounted for:

- school characteristics (Ofsted rating, phase, attainment quintile, FSM quintile, region, school type, percentage of school pupils who are Black, Asian or from a Minority Ethnic (BAME) group)
- teacher characteristics (age group, gender)
- pupil and parent engagement
- teachers' approaches to catch up
- continuing professional development (CPD) provided to teachers by the school (such as training to use specific software or hardware, and managing safeguarding concerns)
- whether the school was open
- whether the teacher was providing remote learning and teaching pupils they would normally teach
- the most recent learning activity set by the teacher.

We tested a large number of variables in our modelling, many of which did not appear to be significantly related to pupils falling behind (see Appendix C for more detail on the methodology.)

The final model identified the following factors were most closely associated with the likelihood of pupils failing behind at the five per cent significance level ($p < 0.05$).

Table 1: Factors significantly associated with pupils falling behind

Factors associated with pupils not falling behind	Factors associated with pupils falling behind
School- and teacher-level factors	**School- and teacher-level factors**
• Secondary schools compared to primary schools. • Schools with the lowest proportions of pupils eligible for free school meals (FSM).	• Schools with the highest proportions of pupils eligible for free school meals (FSM). • Schools with the lowest levels of pupil attainment.
Learning factors	**Learning factors**
• Teachers whose most recent learning activity was collaborative working. • Schools where a large proportion of pupils' parents were fully engaged with home learning.	• Teachers in schools which have not provided training, or who did not feel they needed training to provide remote learning support. • Teachers who were not able to teach at their usual standard, relative to teachers who were.

In our first survey, we identified collaborative distance learning activities and parental engagement as key to pupil engagement during lockdown (Lucas *et al*., 2020). These areas have again featured as protective factors in this analysis, along with the negative influences of a lack of training to provide remote learning support and teachers' inability to teach at their normal standard. We explain the reasons behind this latter issue below (see Section 2.4.2).

Most teachers (70 per cent) reported they were already identifying gaps in pupils' curriculum learning.

In July, the majority (70 per cent) of teachers reported they were already identifying gaps in pupils' curriculum learning by observing pupils (56 per cent), asking questions to find out what they knew (55 per cent), providing feedback (42 per cent), and asking them to summarise what they had learnt (20 per cent). Further, six per cent of teachers had assessed gaps in pupils' curriculum learning using tests or past papers, and three per cent had already used external assessments that compared pupils against national benchmarks.

2.2.2 Differences between pupils

The curriculum learning gap between disadvantaged pupils and their peers within schools has widened by 46 per cent.

Several reports have warned that Covid-19 will have a disproportionate impact on economically disadvantaged pupils, and is likely to widen the disadvantage attainment gap (Montacute, 2020; EEF, 2020d; Children's Commissioner, 2020b). The Education Endowment Foundation (EEF) estimated that school closures are likely to have widened the existing attainment gap between disadvantaged children (i.e. those eligible for the Pupil Premium) and their peers nationally by 36 per cent, with plausible estimates ranging between 11 and 75 per cent (EEF, 2020d).

Our teacher survey included two questions on this issue, first asking teachers to estimate how far their Pupil Premium pupils were behind in their curriculum learning compared to all other pupils in July 2020; and second, how far their Pupil Premium pupils were behind other pupils in their curriculum learning at the same time last year. These questions were used to construct a measure of how far the learning gap between disadvantaged pupils (as measured by Pupil Premium eligibility) and their peers had increased[9].

Until all children have returned to school and can be properly assessed by their teachers, it is difficult to get an accurate measure of how children's learning has been affected by school closures, and the extent to which the gap between disadvantaged children and their peers has changed. Our estimates need to be treated with caution as teachers will not have seen all of their pupils face-to-face to fully assess their learning and have been asked to recall the size of the gap between disadvantaged pupils and their peers last year. In addition, our measure only captures within-school changes in the gap and so is likely to be an underestimate.

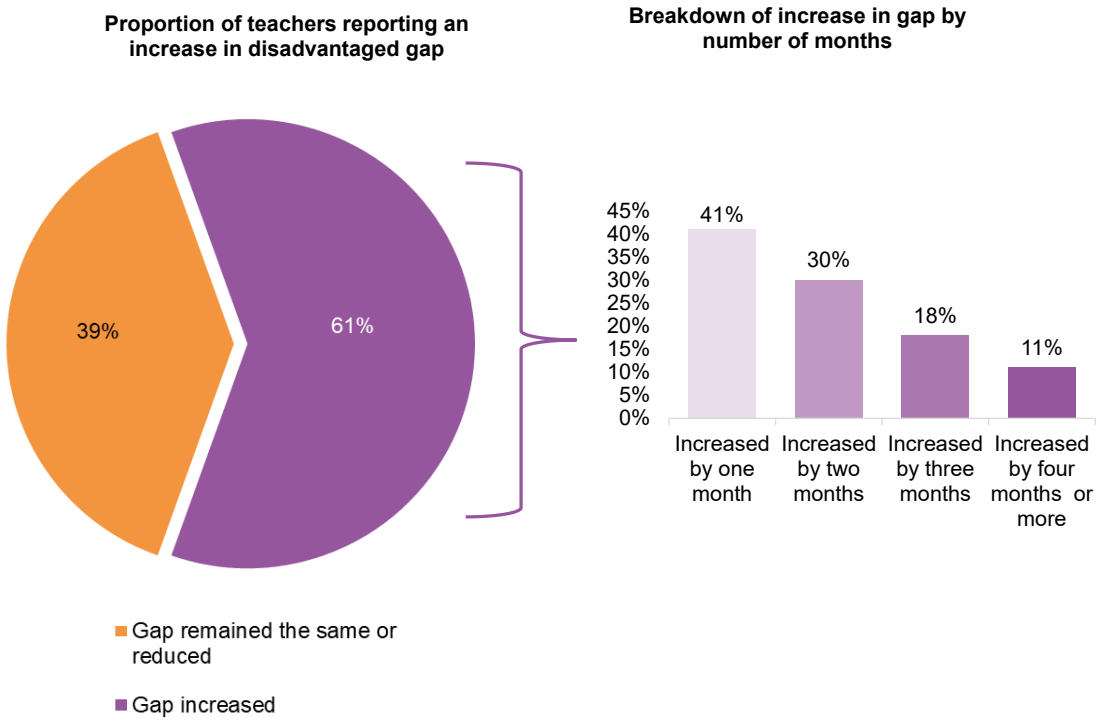
More than half of teachers (61 per cent) reported that the learning gap between disadvantaged pupils and their peers had increased. Out of the remaining 39 per cent, the majority judged that the 'disadvantaged learning gap' had remained the same (32 per cent) or reduced (seven per cent). The reduction in the disadvantaged learning gap reported by a minority of teachers may be due to non-disadvantaged pupils having lost more learning than their disadvantaged peers, rather than disadvantaged pupils having closed the gap with their peers.

Figure 3 shows the overall change in the estimated gap and the extent of the increase. On average, the gap between disadvantaged pupils and their peers increased by just over a month. Of the teachers reporting an increase in the gap, 41 per cent reported that the gap had increased by one month, a further 30 and 18 per cent reported that the gap had increased by two and three months respectively, while the remaining 11 per cent reported that the gap in learning between disadvantaged pupils and their peers had increased by four months or more. It is worth noting, however, that a substantial number of survey respondents did not provide an estimate for the size of the gap between disadvantaged pupils and their peers.

An increase in the disadvantage gap of this magnitude translates into a 46 per cent increase on the disadvantaged learning gap reported in July 2019. However, there is a wide range of uncertainty around this estimate, and the limited number of responses suggests this was a challenging question

9 It should be noted that respondents who reported that their Pupil Premium pupils were six months or more behind in their curriculum learning compared to all other pupils in either July 2020 or at the same time last year were excluded from our estimates as it was not possible to construct an accurate measure of how far the learning gap between disadvantaged pupils and their peers had changed based on these responses. This is not a significant issue as we tested the sensitivity of our results to including these respondents using an approximation and results were comparable.

Figure 3: The increase in the learning gap between disadvantaged pupils and their peers



Source: NFER survey of 1782 classroom teachers: 841 teachers responded.

for many teachers to answer[10]. Despite differences in methodologies, this order of increase in the disadvantaged learning gap is consistent with the range of estimates identified by EEF (2020d).

Whereas most teachers estimate that there was no gender-related difference in curriculum-related learning, over 20 per cent of teachers reported that boys had fallen behind more than girls.

The extent to which pupils had fallen behind in their curriculum learning not only varied by disadvantage, but also between girls and boys. Most teachers (78 per cent) either reported that both sexes were equivalent in the extent to which they were behind their usual learning levels or that they did not know whether both sexes had lost the same amount of learning. However, nearly all of the remaining 22 per cent of teachers reported that boys were more behind[11] their usual learning levels than girls.

This finding may be due to behavioural, developmental and expectation differences between boys and girls (Cassen and Kingdon, 2007). As boys already underperform at school on average relative to girls (Shaw *et al*., 2016), targeted catch-up support may be required to ensure that gender gaps do not widen further.

2.2.3 Differences in the extent to which pupils were behind by phase

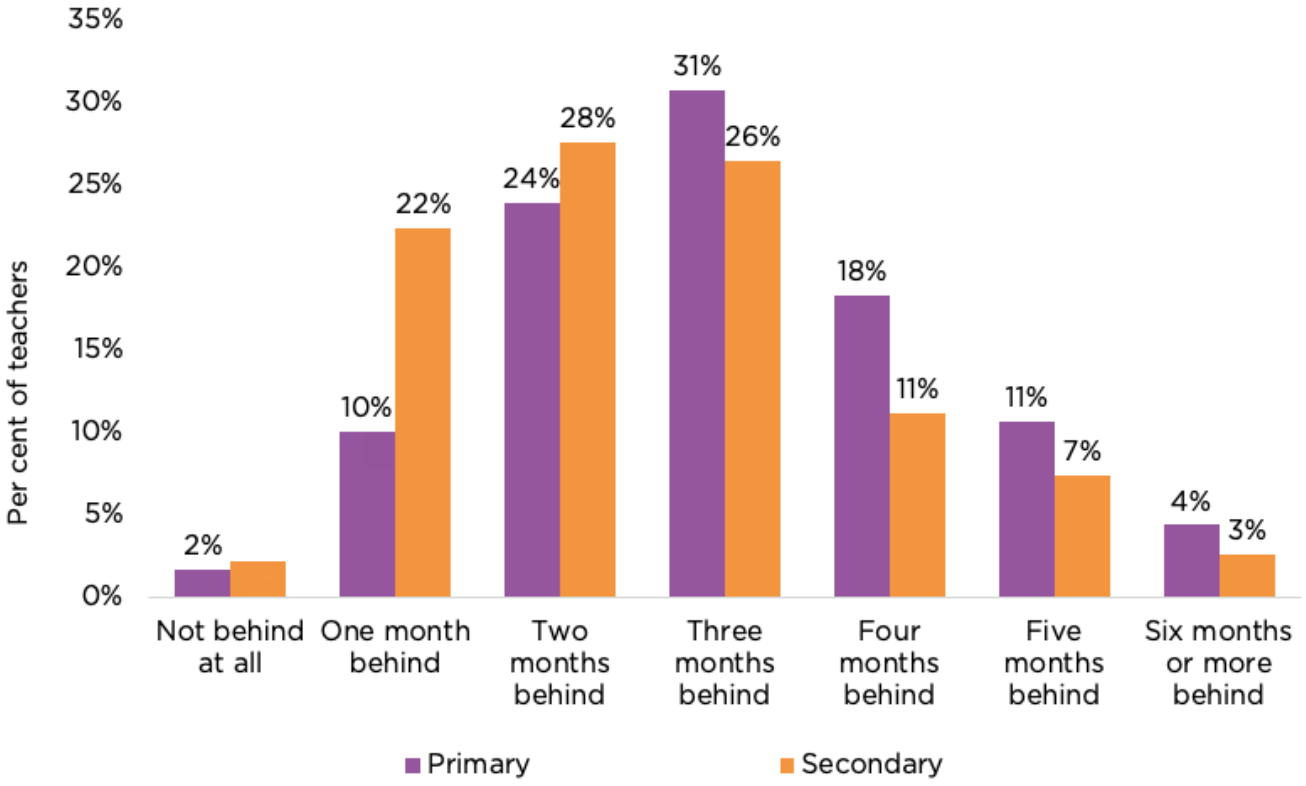
Primary teachers estimate larger reductions in pupils' curriculum learning than their colleagues in secondary schools.

Teachers in primary schools tended to report that their pupils were further behind normal expectations than teachers in secondary schools. Primary teachers estimated their pupils to be an average of three months behind expectations compared to estimates of two-and-a-half months by secondary teachers. Nearly 33 per cent of primary teachers reported that their pupils were four months or more behind where they would usually be, compared to 21 per cent in secondary schools. This is shown in Figure 4. The difference in pupils falling behind between primary and secondary schools persists once other school and teacher characteristics and practices are accounted for (see Box 2). This pattern was also reflected in the proportion of the curriculum that teachers reported having covered: on

10 Teacher estimates of the absolute size of the disadvantaged learning gap collected during this research are substantially lower than previous calculations of the national attainment gap between disadvantaged pupils and their peers, at only 2.5 to 3.5 months. This is likely to reflect the different focus of our questions on 'curriculum learning gaps' rather than the 'attainment gap'; the difficulties teachers are likely to have had in estimating differences they have not seen; and the focus of our analysis on within-school rather than national differences.

11 We did not ask teachers to estimate the extent of this (e.g. in months).

Figure 4: Learning loss in primary and secondary schools



Source: NFER survey of 1782 classroom teachers: 1489 teachers gave at least one response.

average, primary teachers reported having covered 65 per cent of their usual curriculum, compared to 69 per cent for secondary teachers.

There are a number of reasons that might explain why teachers in primary schools reported larger learning losses than their colleagues in secondary schools. Secondary pupils have had greater access to IT and online learning activities such as live lessons (Lucas *et al.*, 2020); support for primary pupils has tended to have a greater pastoral focus (Julius and Sims, 2020); and there may have been greater challenges involved in teaching the primary curriculum online. Further, parental engagement is likely to be particularly critical to the progress of primary pupils learning remotely. The fact that primary teachers estimated that only 56 per cent of parents were fully engaged in their children's remote learning in May and that this proportion remained low (44 per cent) in July (see Section 3.5.3) may explain why teachers in primary schools reported larger curriculum learning losses[12]. While primary pupils are less likely to be close to taking high-stakes examinations, the fact that primary pupils were, on average, further behind than secondary pupils could still have significant consequences for the affected cohorts and the wider economy, as early environment and schooling have been shown to have persistent effects on longer-term outcomes (Heckman, 2006).

Primary and secondary teachers were using different methods to identify gaps in pupils' learning. Primary teachers were more likely to report that they were identifying gaps by observing pupils working (60 per cent compared to 33 per cent), asking pupils to summarise what they had learnt (26 per cent compared to 19 per cent), and asking them questions to find out what they knew (56 per cent compared to 45 per cent). Conversely, secondary teachers were significantly more likely to report using tests or past papers to identify gaps in pupils' learning (18 per cent compared to four per cent). These patterns were likely to be influenced by the fact that more primary than secondary pupils had been attending school since they opened more widely in June (see Section 2.4), and by the differences in pedagogical approaches between primary and secondary schools.

12 Parental engagement reported among secondary schools was similar in May and July (48 per cent and 45 per cent). While the difference in parental engagement among primary and secondary schools was significantly different in May, there was no longer a significant difference in July.

Learning gaps between disadvantaged pupils and their peers increased more in secondary than in primary schools.

Teachers in secondary schools were more likely to report that the learning gap between disadvantaged pupils and their peers had increased. Indeed, the learning gap in secondary schools increased by 76 per cent compared to 41 per cent in primary schools, albeit there is a large range of uncertainty around these estimates. Secondary teachers were also more likely to report that boys were behind girls in their curriculum learning than primary. While almost two fifths of secondary teachers reported that boys were more behind their usual learning levels than girls, this was reported by less than a fifth of primary teachers.

2.2.4 Differences in the extent to which pupils were behind by school deprivation

Pupils in deprived schools are further behind than pupils in more affluent schools.

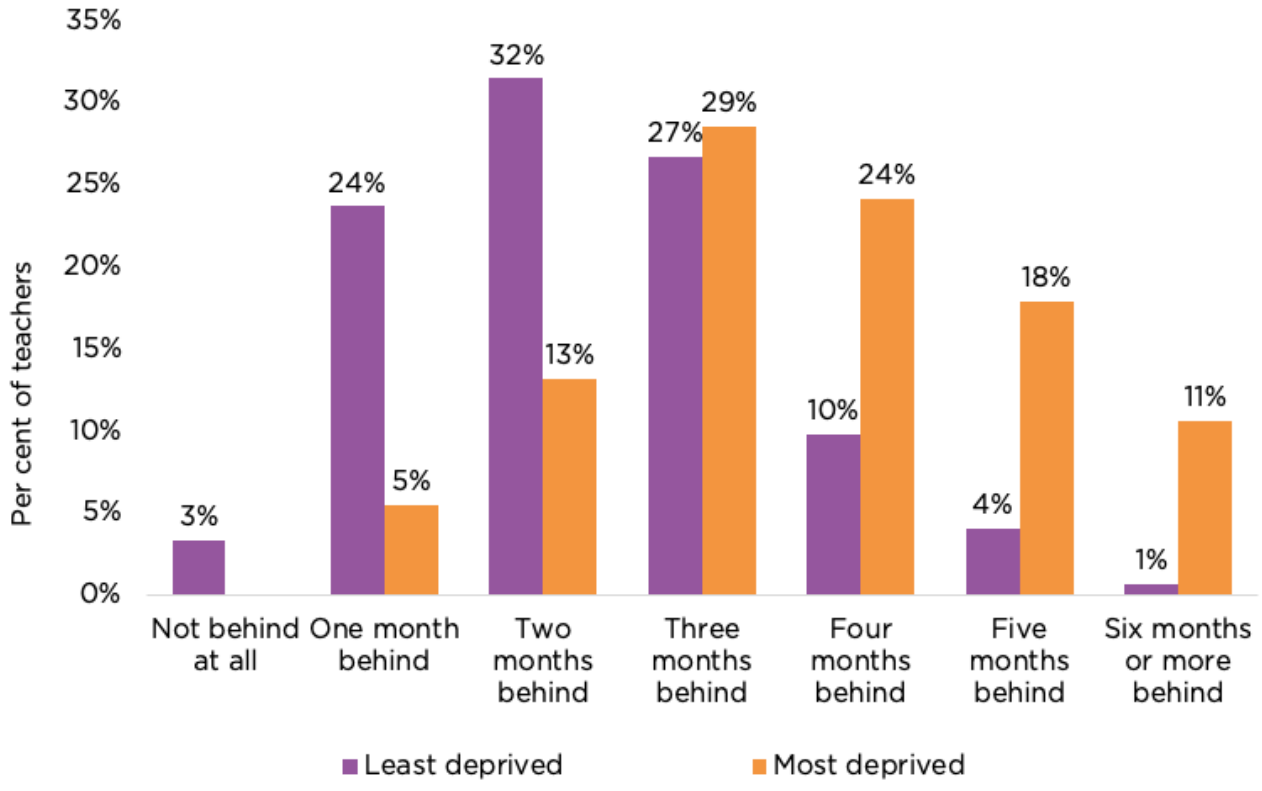
Teachers in more deprived schools were significantly more likely to report – over and above other school and teacher characteristics and practices (see Box 2) – that their pupils were further behind compared to where they would normally expect them to be at this time of year. While around half (53 per cent) of teachers in the most deprived schools reported that their pupils were four months or more behind, this was only reported by 15 per cent of teachers in the least deprived schools. A similar pattern can be observed in lower attaining schools.

This was, again, related to the proportion of the curriculum that teachers reported having covered. Teachers in the most deprived schools reported covering 61 per cent of the curriculum on average, compared to 67 per cent in a median school and 71 per cent in the least deprived schools.

This confirms that Covid-19 led to an increase in curriculum learning loss between pupils in more and less disadvantaged schools. We did not, however, find any evidence to suggest that the gap between disadvantaged pupils and their peers within deprived schools had increased more than the gap within less deprived schools.

There were also no observable differences in the methods that teachers reported using to assess how far behind pupils were between more and less deprived schools. However, the proportion of work teachers said they had provided feedback on was significantly lower among teachers in the most deprived schools. While teachers in schools with the least disadvantaged pupils said they provided feedback on 72 per cent of returned work, this dropped to just over half (56 per cent) of returned work among teachers from the

Figure 5: Learning loss in the least and most deprived schools



Source: NFER survey of 1782 classroom teachers: 1408 teachers gave at least one response.

most deprived schools. It is possible that this reflects the additional challenges faced by teachers in more disadvantaged schools. For example, given that more pupils in more deprived schools have little or no IT access (Lucas *et al.*, 2020), it may have been more difficult for teachers to provide feedback. As engaging with and commenting on pupils' work is a key element of effective formative assessment, this suggests that teachers in more deprived schools were likely to have less information available to inform their understanding of how far behind their pupils were compared to normal expectations.

2.2.5 Differences by ethnic background

There is no observable pattern between pupils falling behind and schools with more pupils from a BAME background.

The Covid-19 pandemic has had a disproportionate health impact on people from Black, Asian and Minority Ethnic (BAME) backgrounds relative to people from white British backgrounds (Mamluk and Jones, 2020). Pupils from a BAME background (defined as those with at least one BAME parent) are also significantly more likely to live with an adult at risk of Covid-19 (Eivers *et al.*, 2020). One of the challenges associated with identifying a relationship between pupils falling behind and schools with more BAME pupils is that BAME pupils tend to be from more disadvantaged communities (Shaw *et al*., 2016). We were also limited to data at the school level, rather than the level of the individual, which means we were unable to disentangle the impact of being BAME from the impact of being in a school with a large proportion of BAME pupils. To overcome the first issue, we used a regression model to investigate the association between pupils falling behind and the share of BAME pupils within a school over and above differences in disadvantage across schools (see Box 2).

Our analysis did not indicate there was a relationship between how far behind in their curriculum-related learning pupils were perceived to be and the proportion of BAME pupils within the school. We did, however, find evidence that schools with a higher proportion of BAME pupils within the school had lower attendance (see Section 2.4) and disproportionately larger shares of pupils requiring intensive catch-up support (see Section 2.3).

2.3 Catch-up support

This section focuses on the extent to which schools perceived a need for catch-up support for their pupils. In the context of pupils having fallen behind with their learning, and a widening learning gap, it considers the proportion of pupils that senior leaders and teachers perceived to be in need of intensive catch-up support. It discusses where the need for catch up was greatest, and how schools had started to respond.

Senior leaders and teachers estimated that almost half of their pupils were in need of intensive catch-up support. This figure was significantly higher in the most deprived schools.

We asked both senior leaders and teachers to estimate the percentage of all their pupils (both those learning in school and remotely) who were in need of intensive catch-up support over and above normal expectations at this time of year. Teachers estimated that over two-fifths of their pupils (44 per cent) were in need of such support, while senior leaders estimated this figure to be slightly higher (48 per cent). These figures are exceptionally large and indicate the extent of the challenge that schools will face in September 2020 when all pupils are expected to return to school.

There was a difference in perception between teachers and senior leaders about the extent of catch-up need according to school phase. The difference between senior leaders' and teachers' responses may be due to the fact that senior leaders were looking at the aggregate need across the school whereas teachers were focusing on their own pupils and catch-up strategies. Secondary teachers reported a higher need for intensive catch-up support than primary teachers (52 compared to 43 per cent), while the reverse was true for senior leaders. Primary leaders reported a higher need than secondary leaders (50 compared to 43 per cent).

Senior leaders' responses mirror the finding from the previous section, that is that primary pupils were more likely to have fallen behind in their learning than secondary pupils. Teachers' responses are quite intuitive, however, when one considers that the need for catch up is likely to be much more pressing where there is an external requirement to be met, and as pupils near the end of their school careers with less formal learning time ahead of them in which to catch up. For Key Stage 4 pupils working to examination specifications, the need for catch-up support is likely to be quite intense in the short term, irrespective of the modifications that Ofqual anticipate making to the 2021 examinations (Ofqual, 2020).

For the remainder of this section, we lead the discussion with teachers' views. Teachers are likely to have a more in-depth understanding of their pupils' learning needs than senior leaders, especially at a point where few schools had made formal assessments of pupils' learning levels.

There was a very clear association between the level of disadvantage in the school and the need for catch-up support over and above other school and teacher characteristics. The proportion of pupils that teachers believed to be in need of intensive catch-up support was 25 percentage points higher in the most compared to the least deprived schools (57 compared to 32 per cent). Senior leaders' responses showed the same pattern, but with a larger differential between the most and least deprived schools (66 compared to 34 per cent – 31 percentage points).

According to teachers, the proportion of pupils in need of intensive catch up was significantly higher in schools with more pupils from BAME backgrounds than in schools with fewer pupils from BAME backgrounds.

The proportion of pupils estimated to be in need of intensive catch-up support was higher in schools with higher proportions of pupils from BAME backgrounds, as shown in Figure 6. Using regression analysis, we confirmed that this finding persisted even once disadvantage and other school and teacher characteristics were accounted for (see Box 3).

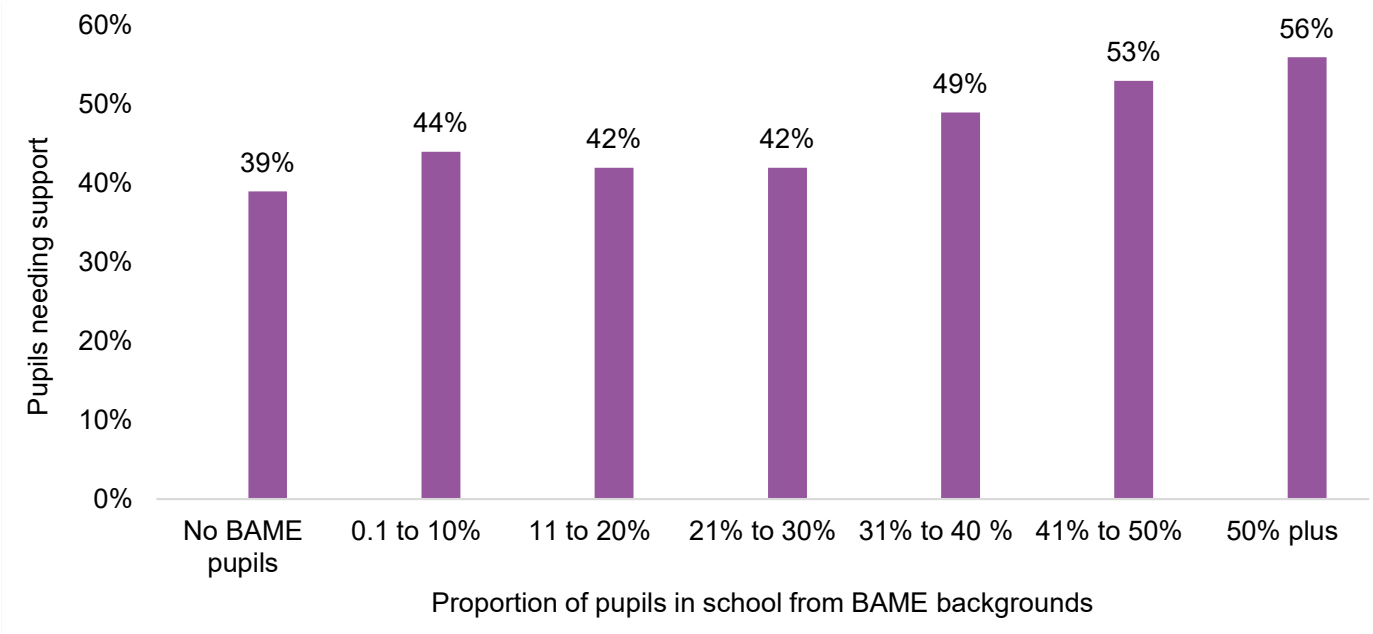
2.3.1 Factors influencing the need for catch-up support

We produced a model exploring the factors that were associated with either a decrease or an increase in the need for catch-up support (see Box 3). Findings related to school characteristics confirm the findings reported earlier in this section.

The results show that particular strategies adopted for remote teaching and learning had a more or less positive association with the need for catch-up support. Corroborating the evidence in EEF's guide to remote learning (EEF, 2020e), our research found that strategies which involved supporting pupils to manage their own learning (a self-regulation approach), and those which involved providing effective feedback, were positively associated with a decrease in teachers' estimates of the need for catch-up support among their pupils. A high level of parental engagement was also associated with reduced catch-up need.

In contrast, when teachers did not feel able to teach to their usual standard, or when they did not have access to the resources they needed, they were more likely to identify a need for catch-up support for more of their pupils. However, the association between teachers whose most recent learning activity involved presenting content in a live session and an increased need for catch up is surprising. One possibility is that teachers who engaged in live learning developed a clearer sense of their pupils' needs through their interactions and therefore had an enhanced awareness of their needs, making more accurate estimates.

Figure 6: The proportion of pupils in need of intensive catch-up support by the proportion of pupils in school from BAME backgrounds



Source: NFER survey of 1782 teachers: 1344 teachers responded.

Box 3. Which factors are most closely associated with pupils requiring intensive catch-up support?

We used a regression model to examine the association between different variables and the need for intensive catch-up support (measured by the share of pupils reported by teachers as requiring intensive catch-up support), over and above other factors. See Box 2 and Appendix C for further details on the methodology.

Our model identified large differences in the share of pupils requiring catch-up support between different schools. Indeed, the share of pupils requiring intensive catch up in the most deprived schools was still 17 percentage points higher than in the least deprived schools, after controlling for various factors. Similarly, the share of pupils requiring intensive catch-up support in secondary schools was nine percentage points higher than in primary schools. Finally, we identified a relationship between the share of BAME pupils in the school and the share of pupils requiring catch-up support, which is particularly large in primary schools.

Barriers to teaching are associated with a need for greater catch-up support. For example, teachers who were not able to teach at their usual standard or did not have access to subscription-based educational resources reported a five and four percentage point higher share of pupils requiring intensive catch-up support respectively. We also observed an association between the most recent learning activity and catch-up need: teachers whose most recent learning activity was teaching content in a live session or undertaking coursework tended to have more pupils requiring intensive catch-up support. These patterns are likely to reflect the different challenges that teachers are facing in supporting their pupils.

Table 2: Factors significantly associated with a need for catch-up support

Factors associated with a decrease in the number of pupils requiring intensive catch up	Factors associated with an increase in the number of pupils requiring intensive catch up
School- and teacher-level factors • Schools with lower proportions of pupils eligible for free school meals (FSM). **Learning factors** • Teachers whose most recent learning activity was teaching pupils strategies to manage their own learning. • Teachers who were providing pupils with feedback about their work to help observe curriculum learning loss. • Schools where a large proportion of pupils' parents were fully engaged with home learning.	**School- and teacher-level factors** • Schools with the highest proportions of pupils eligible for free school meals (FSM) and the lowest levels of pupil attainment. • Secondary schools compared to primary • Schools with a larger share of BAME pupils. **Learning factors** • Teachers whose most recent learning activity involved presenting content in a live session or undertaking coursework. • Teachers who did not have access to subscription-based educational resources. • Teachers who were not able to teach at their usual standard, relative to teachers who were.

2.4 Conditions which have influenced pupils' learning during the summer term

This section focuses on the factors that have influenced pupils' learning, including their attendance and the provision of in-school and remote learning. This will help to build a picture of what needs to happen in the 2020/21 school year.

Most senior leaders were able to comply with government guidance to reopen their schools to support the return of key transition year groups[13].

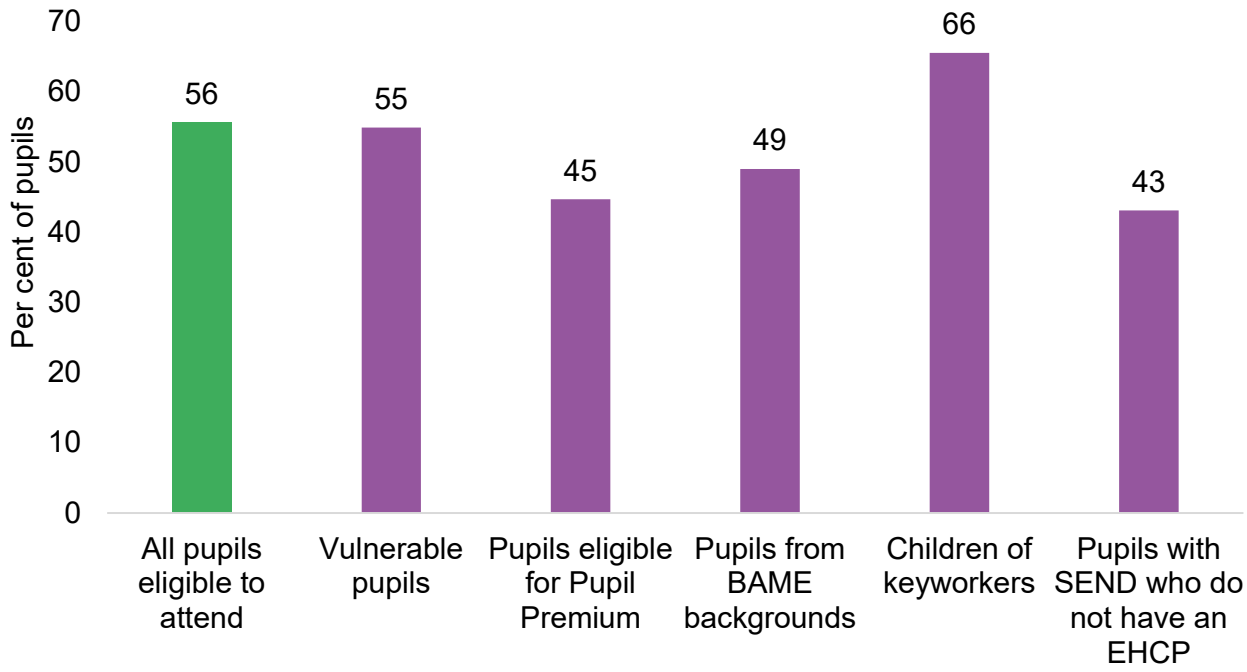
In July, the vast majority of senior leaders (96 per cent) said that their school was open to some year groups in addition to vulnerable pupils and the children of keyworkers. In line with government guidance (DfE, 2020a) most primary schools (over 90 per cent) were open to three key year groups (Reception, Year 1 and Year 6) but only 75 per cent of schools with Nursery provision opened their Nursery classes. At secondary level, 99 per cent of schools that were open provided some face-to-face opportunities for pupils in Year 10 and 91 per cent were open to Year 12. According to DfE estimates (2020b), daily attendance rates[14] among schools open to at least one key transition year group were highest for Year 6 (approximately 49 per cent), followed by approximately 42 per cent for Reception pupils and 40 per cent for Year 1 pupils. Among secondary schools open to key year groups, the DfE estimated that daily attendance rates for Year 10 and Year 12 were 15 per cent and 14 per cent respectively.

Some schools also opened to other year groups, particularly Year 5 (43 per cent of primary schools). Schools were likely to have prioritised Year 5 pupils because they were about to transition into Year 6 and so would be a priority year group in the new academic year.

Only just over half of pupils invited to attend did attend in July. Attendance was lower among disadvantaged pupils and those from BAME backgrounds and in schools with the highest levels of deprivation.

Despite nearly all schools opening more fully, senior leaders reported that just over half of eligible pupils (56 per cent) were attending for at least some of the time in July. Pupil attendance also varied by group[15] as shown in Figure 7.

Figure 7: The percentage of pupils eligible to attend who attended school in July 2020



Source: NFER survey of 1176 senior leaders: 936 senior leaders gave at least one response.

13 The key transition year groups were Nursery, Reception, Year 1, Year 6, Year 10, and Year 12.

14 Schools and colleges were asked to report the number of children and staff in attendance if they were open each day (DfE, 2020b) and the figures given above represent attendance by the end of the summer term. This data does not capture the proportion of time pupils were able to attend school during this time. For example, some schools may have operated a rota system which limited attendance to 40 per cent of the time, but allowed all pupils in key year groups to attend school over the course of a week.

15 Senior leaders were asked if they had pupils in their school who fell into each of these groups: 99 per cent had keyworker children, 97 per cent had vulnerable pupils, 86 per cent had pupils eligible for Pupil Premium, 84 per cent had pupils with special educational needs and disabilities (SEND) but no education, health and care plan (EHCP), and 65 per cent had pupils from BAME backgrounds.

Attendance among the children of keyworkers was notably higher than all other pupil groups (66 compared to 56 per cent), while attendance among vulnerable pupils was very similar to the average for all pupils eligible to attend at that time (55 compared to 56 per cent). Conversely, attendance among pupils eligible for the Pupil Premium (45 per cent), pupils from BAME backgrounds (49 per cent), and pupils with special educational needs and disabilities (SEND) who did not have an education, health and care plan (EHCP)[16] (43 per cent) was lower than the average for all pupils.

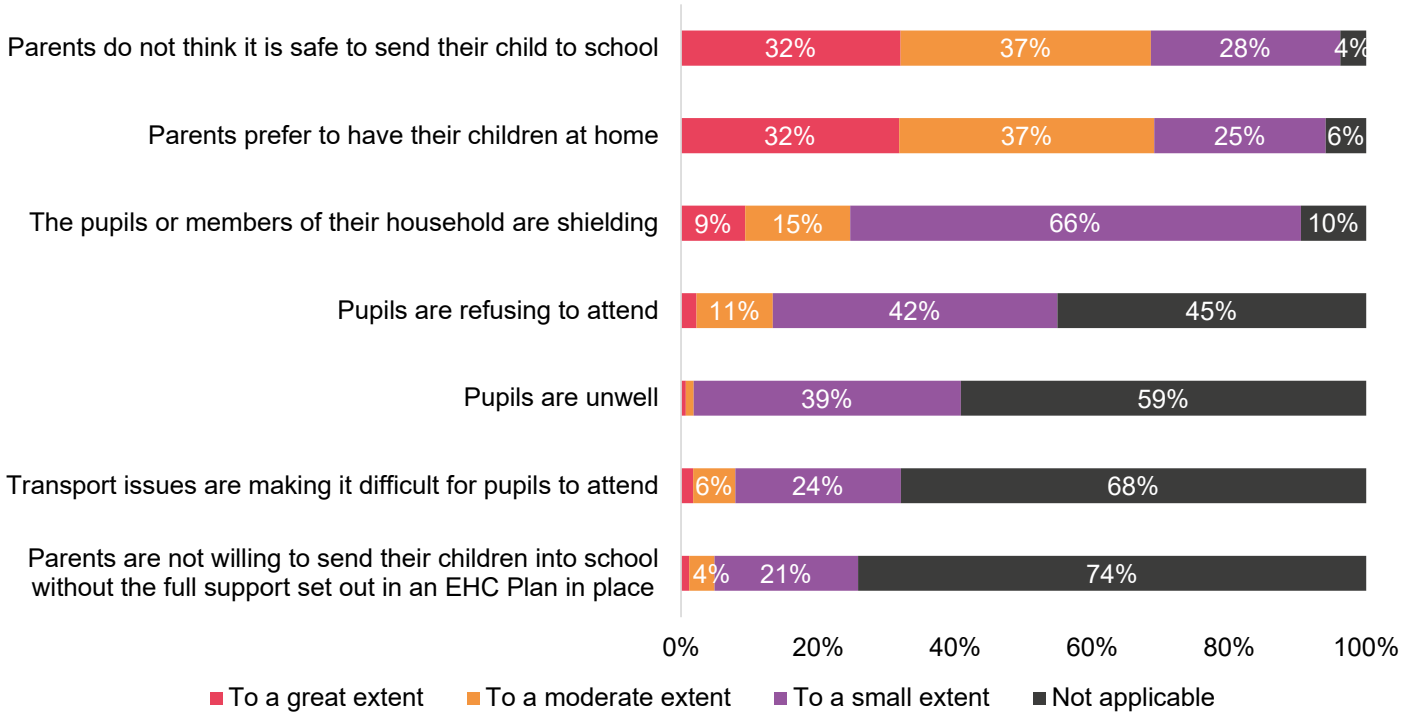
Among all pupils eligible to attend, there was a 25 percentage point difference in the percentage of pupils attending for at least some of the time in the most and least disadvantaged schools, according to senior leaders (45 per cent compared to 70 per cent).

Looking ahead to September, these findings indicate that higher proportions of disadvantaged pupils will not have attended schools since March, and potentially missed out on learning opportunities relative to their more affluent peers. This is particularly concerning considering that disadvantaged pupils already tended to have higher rates of absence than their peers at all ages prior to the pandemic (DfE, 2018a). In the 2019/20 academic year, disadvantaged pupils had an overall absence rate of 7.5 per cent (compared to 4.2 per cent among non-FSM pupils) and a persistent absence rate of 22.8 per cent – more than double the rate for non-FSM pupils (8.3 per cent) (DfE, 2020g). This raises the wider concern that when schools reopen in September, high levels of absence may persist among disadvantaged pupils, contributing to a widening of the disadvantage gap (EEF, 2020d). The evidence highlights the importance of continued efforts from schools and the Government to support disadvantaged pupils and their families to return pupils to school and maximise their attendance from September.

Senior leaders reported that parents were concerned it was not safe for their children to return to school and many parents preferred to keep their children at home. Safety concerns were more pronounced among primary-age pupils, the most deprived schools, and schools with a high proportion of BAME pupils.

Senior leaders reported that both safety concerns and the wish to keep children at home were affecting pupils'

Figure 8: Reasons for pupils invited to attend school not currently attending, or not attending regularly



Source: NFER survey of 1176 senior leaders: 1127 senior leaders gave at least one response.

16 An EHCP is a plan for children and young people aged up to 25 who need more support than is available through special educational needs support. EHCPs identify educational, health and social needs and set out the additional support to meet those needs.

attendance in their schools to a great extent (32 per cent in both cases). Another contributory reason for non-attendance was that pupils or members of their households were shielding: nine per cent of senior leaders said this was causing non-attendance to a great extent. A majority of senior leaders reported that other issues – namely pupil illness, transport issues, and parents not being willing to send their child to school without their full EHCP in place – did not apply as reasons for non-attendance in their schools.

Parental concerns about the safety of returning their children to school were more pronounced in primary than secondary schools. Over a third (35 per cent) of primary, compared to 18 per cent of secondary, leaders identified this to a great extent. Shielding, pupil illness, transport issues, and parents being unwilling to send their children to school without their EHCP support in place were more extensive issues for secondary than primary leaders.

Senior leaders from the most deprived schools were considerably more likely to report parents thinking that it was unsafe to send their children to school as a reason for non-attendance to a great extent than those from the least deprived schools (50 compared to 19 per cent). This evidence is particularly concerning in light of our previous survey findings, which showed that pupils and parents from disadvantaged schools were also less likely to engage with remote learning (Lucas *et al.*, 2020). It also further validates concerns about the disadvantage gap widening as a result of the pandemic (EEF, 2020d).

Senior leaders from schools with high proportions of pupils from a BAME background were also more likely to report parents thinking it was unsafe for pupils to return to school as a reason for non-attendance than senior leaders in schools with no BAME pupils. We initially found multiple significant differences by ethnicity, but only this finding remained significant once we controlled for other factors, including disadvantage (FSM). While 35 per cent of senior leaders in schools with no BAME pupils reported parental concerns about safety to be an issue to a great extent, this nearly doubled to 65 per cent of senior leaders in schools with the majority of pupils from BAME backgrounds[17].

As previously discussed, this may be related to medical evidence suggesting that individuals from BAME backgrounds are most at risk from Covid-19 (PHE, 2020). It seems that parents in schools with a high concentration of BAME pupils were likely to feel more anxious about their children returning to school and the potential health risks involved.

2.4.1 Availability of teaching staff

The vast majority of teachers were available to work in July and over four-fifths were available to work in school.

Senior leaders reported that 92 per cent of their usual full-time equivalent (FTE) teaching staff were available to work in July, compared to 75 per cent in May (Sharp *et al.*, 2020). There were no significant differences in the availability of teaching staff in July by phase or the level of disadvantage of the school.

In addition to these changes in overall staffing availability, there was also an increase in the proportion of staff available to work in school. In July, senior leaders reported that over four-fifths (83 per cent) of teachers were available to work in school, with 17 per cent available to work from home only. In May, a much larger proportion (29 per cent) of teachers had been only available to work from home (Sharp *et al.*, 2020).

Teachers being signed off sick, maternity/paternity leave and caring responsibilities were the main reasons staff were not available to work.

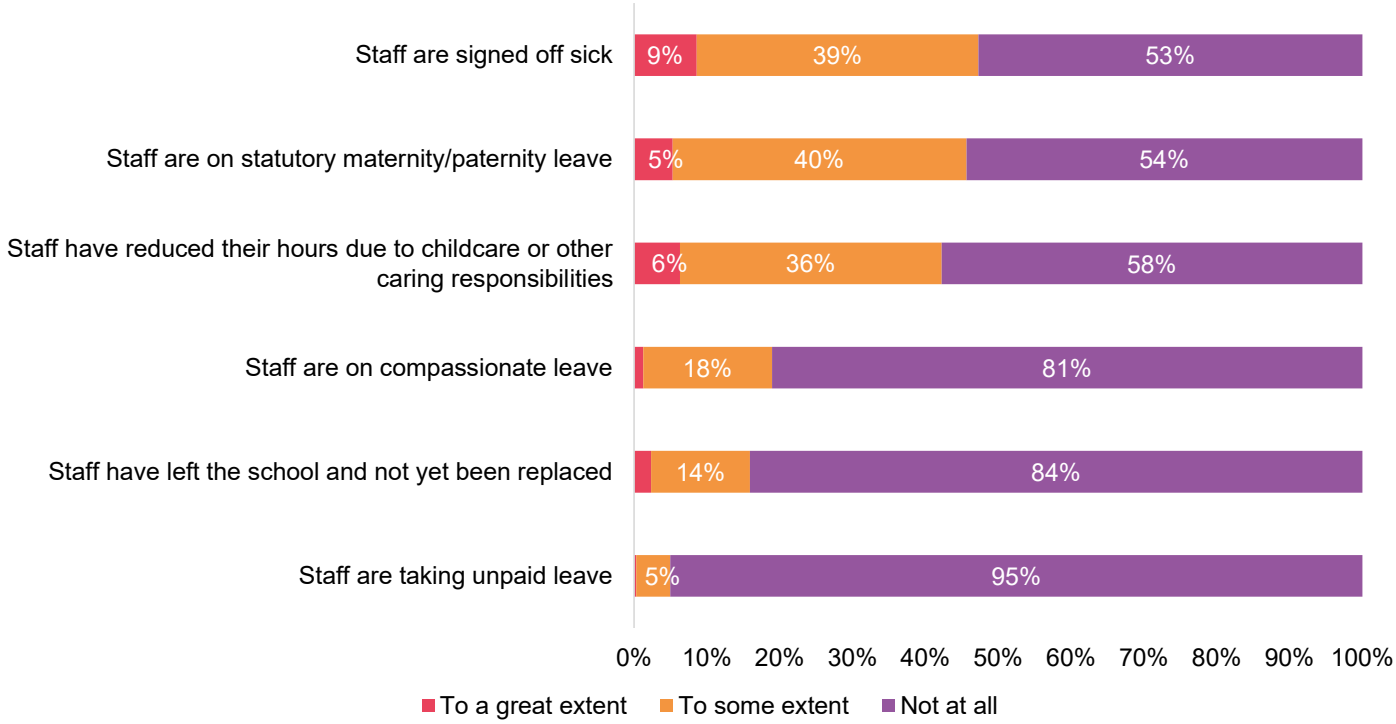
A relatively small number of senior leaders (478) presented reasons for reduced teaching staff capacity. Just under half reported that teachers being signed off sick (47 per cent), on maternity/paternity leave (46 per cent), or having childcare/caring responsibilities (42 per cent) had reduced their staffing availability to some or a great extent. It is unclear whether or not the sickness they reported was Covid-19 related. A minority reported that teachers taking compassionate leave (19 per cent), having not yet replaced teachers who had left the school (16 per cent), and teachers taking unpaid leave (five per cent) had contributed to reduced staffing levels[18]. While most of these reasons for absence are commonplace outside the context of the pandemic, it is likely that Covid-19 exacerbated the prevalence of some of these in schools.

In an open-response question, senior leaders, mainly from primary schools, highlighted that shielding continued to contribute to the reduced availability of their teaching staff. This is surprising as we would expect shielding teachers to be able to continue working from home. However, there are some scenarios in which shielding may have caused sufficient disruption as to prevent a teacher from working entirely. As discussed in Section 3.5.2, the teachers in question

17 The proportion of senior leaders from schools in the second lowest BAME pupil group who reported this as an issue to a great extent was also significantly lower than schools with the majority of pupils from BAME backgrounds (23 compared to 65 per cent)

18 Due to rounding some of these percentages are slightly different to those presented in Figure 9.

Figure 9: Factors contributing to a less than normal FTE teaching staff being available to work



Source: NFER survey of 1176 senior leaders: 478 senior leaders gave at least one response.

may not have the personal resources (e.g. a laptop or internet connectivity) to enable them to work from home, and a minority of schools were unable to make such provision for teachers. Similarly, the nature of the teacher's job may have been such that, if not in school, it was difficult for them to perform their role remotely (for example, if they were Nursery or Reception teachers) and senior leaders may have been unable to redeploy them.

2.4.2 Teaching provision for pupils attending school

Although some pupils, particularly in primary schools, were able to spend time learning in school, there was extensive disruption to the teaching and learning provision schools were able to put in place due to social distancing requirements.

Three-quarters of teachers back in school in July did not feel able to teach to their usual standard.

Strikingly, nearly three-quarters (74 per cent) of teachers did not feel able to teach to their usual standard when they returned to teaching in school in July. In responses to an open-ended survey question, just under half (49 per cent) of 1034 teachers whose teaching was affected said that distancing requirements had negatively impacted their teaching practices. This is a substantial response for an open-ended question. Teachers reported that they were no longer able to utilise core elements of good pedagogical practice such as group or practical work, nor did they feel able to move around the class to teach, support and interact with their pupils effectively. Similarly, two-fifths of teachers (39 per cent) reported that they no longer had access to their usual resources such as equipment and learning materials, which was preventing them from teaching to their usual standard. These teachers also highlighted the difficulty of pupils not being able to share resources, as they would do usually; teachers felt this limited the teaching methods they were able to utilise. Some typical examples of teachers' comments are given in the box below. Other factors that teachers felt were preventing them from teaching to their usual standard included:

Pupil-level factors:

- a lack of attendance among pupils
- pupils not concentrating/engaging/behaving while in school.

Teacher-level factors

- being required to teach mixed-age or mixed-ability groups
- not knowing the pupils they were teaching or supervising
- limitations on access to their own/appropriate classrooms
- difficulties with providing ongoing assessment and feedback.

‘Having the children sat in rows at their own tables has removed the opportunities for partner work, shared work & discussions.’

‘I’m normally a very practical teacher with lots of interactivity which I obviously can’t do at the moment.’

‘Not being able to get close enough to each child in order for them to receive specific tailored learning, support, guidance and challenge.’

‘Not able to facilitate coursework and practical activities due to lack of equipment.’

‘Resources for children to access both inside and outside have been limited to minimise cross-contamination.’

These findings demonstrate the disruption to teaching and learning that pupils and teachers who were able to return to school experienced. It is likely that the requirement for social distancing affected the quality of teaching and learning that was able to take place in school – something teachers themselves highlighted. Many of these challenges are likely to remain in September as a result of social distancing requirements.

Pupils were often not being taught by their usual teacher and some classes were being led by a teaching assistant (TA).

Due to social distancing requirements, schools divided classes of pupils into smaller groups for those attending school in June and July 2020. Senior leaders had to distribute their available staff across the pupil groups and many teachers (46 per cent) reported that they were teaching pupils they did not normally teach when they were in school.

Over half of senior leaders (51 per cent) reported that they were using TAs to lead classes at least to some extent. Primary schools were much more likely to be using TAs in this way than secondary schools (55 per cent compared to 32 per cent). The least deprived schools were also more likely than more deprived schools to be using TAs to lead classes to a great extent (12 per cent in the lowest FSM quintile compared to only three per cent in the second highest quintile). Both of these patterns are likely to be explained by pupil attendance levels, which were higher in primary schools and in the least deprived schools – hence there was a greater need for supervision.

Over half of senior leaders reported that they were using TAs to lead classes at least to some extent.

3 Schools' plans for the new academic year

Key findings

- Opening schools while Covid-19 is still a threat poses considerable challenges for senior leaders. Most (89 per cent) predicted they would find it at least somewhat manageable to open their schools to all pupils while minimising contact, but many identified a need for additional staffing and resources (especially for IT equipment in the most deprived schools).
- Out of the senior leaders who thought it was not completely manageable to open their schools under these circumstances, many said they needed additional staffing and resources including teachers, TAs, cleaning staff, support staff, funding for additional cleaning and protective equipment and for IT. The additional costs identified by senior leaders represent around £280,100 per year for an average primary school and £720,600 for an average secondary school, although some of the costs associated with these additional needs will be met by existing government schemes.
- The percentage of teachers and senior leaders intending to leave the profession has reduced by more than half since 2019. If this is translated into actual retention, it would more than compensate for previous teacher shortages.
- In September, senior leaders will initially prioritise the well-being of their returning pupils, re-engaging them with learning and settling them back into school.
- Most teachers expect to use informal methods to identify pupils' curriculum learning gaps, rather than formal assessments. They plan to create time in the day for small-group or one-to-one sessions to support pupils with the greatest need for catch up, using interventions recommended by other teachers.
- Nearly two in five senior leaders plan to access the £350 million National Tutoring Programme (NTP) for disadvantaged pupils. The main barrier for those who were undecided was a concern about using tutors who are unfamiliar to pupils.
- Senior leaders and teachers want the Government to provide more funding and clear, detailed and consistent guidance to help them manage the situation.
- Learning from June and July provides useful experience in case of another outbreak. At a time when the majority of pupils were still learning from home, schools largely focused their staffing capacity towards in-school provision.
- By July 2020, teachers were no more likely to be offering interactive teaching than earlier in lockdown. Secondary teachers were more likely to be using interactive teaching methods and to have received training on different aspects of remote learning provision.
- Although many schools were supplying IT equipment to their staff, over a third of teachers (35 per cent) were providing their own laptop or computer, and three-fifths either supplied their own audio-visual equipment (41 per cent) or had no access (21 per cent).
- Senior leaders reported that 28 per cent of pupils had limited access to IT at home. This was a particular issue for schools serving the most deprived pupil populations.
- There seems to have been some 'remote learning fatigue' by the end of the summer term. Engagement of pupils (38 per cent) and parents (44 per cent) were both lower than in May.
- There is an urgent need for additional IT equipment to ensure that all schools can communicate effectively with pupils, staff and parents.

3.1 Introduction

This chapter focuses on how schools are going to address the challenges set out in the previous chapter during the next academic year, taking into account the need to prioritise safety. It also presents the learning from schools' experiences in the spring and summer terms of 2020, in case of further outbreaks of Covid-19 infection affecting schools at a local or national level.

3.2 Manageability of opening schools fully from September 2020

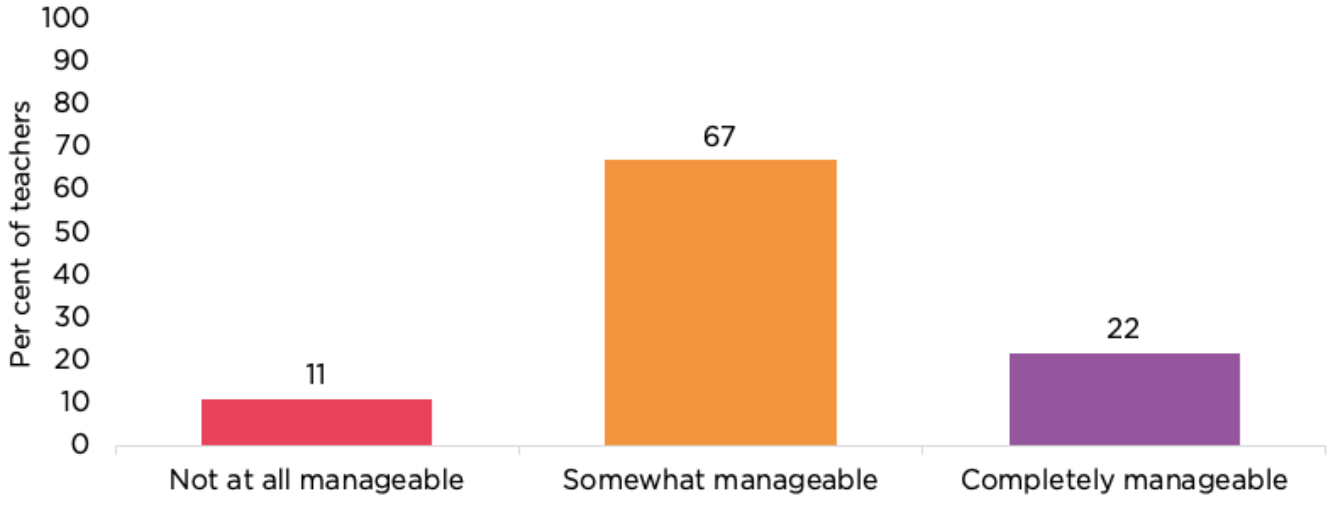
The Government has set a clear expectation that all pupils will attend school full time from September 2020 (DfE, 2020e). However, while Covid-19 continues to pose a threat, schools must take measures to avoid the spread of infection, largely through keeping groups of pupils separate from each other; keeping a distance of two metres between staff and pupils; ensuring personal hygiene (such as regular handwashing); and arranging for regular deep cleaning of the building. For older pupils in secondary schools (i.e. Key Stages 4 and 5), the guidance suggests forming 'bubbles' of a whole year group. For younger pupils it recommends smaller groups than a full size class, if possible, in order to minimise the number of people who could be asked to isolate if someone in the group were to become ill with Covid-19.

Most senior leaders predicted that they will manage to open their schools to all pupils while minimising contact between individuals, but many identified the need for additional staffing and resources.

When asked about the manageability of opening their schools under the conditions advised by the government guidance outlined above, around two-thirds of senior leaders (67 per cent) thought this would be somewhat manageable, around a fifth (22 per cent) thought it would be completely manageable, but around one in ten (11 per cent) felt it would be completely unmanageable. More primary leaders felt this was completely manageable (23 per cent) than secondary leaders (16 per cent). This could be due to primary leaders' experience of opening to more year groups in the summer term, as well as the greater logistical challenge faced by secondary leaders in dealing with much larger numbers of staff and pupils. Forming year-group bubbles and allocating a base to each group poses a substantial challenge for secondary schools, which are used to pupils moving to different rooms and 'sets' for lessons. There was no difference in leaders' views of manageability related to the deprivation of their intake.

Among the 78 per cent of senior leaders who had some concerns about the manageability of opening their schools under these circumstances (those who said it was 'somewhat manageable' or 'completely unmanageable'), many senior leaders said they needed additional staffing and resources including teachers, TAs, cleaning staff, support staff, funding for additional cleaning and protective equipment, and for IT. Increases in staffing requirements are likely to reflect the need to keep pupils in year groups, classes, or smaller 'bubbles', separated from pupils in other bubbles. One primary leader said: 'I have too few midday supervisors and being in a rural community it is unlikely that I will be able to recruit more'. It is also likely that primary and secondary schools are looking to hire more TAs in

Figure 10: Senior leaders' views of the manageability of opening schools to all pupils while ensuring social distancing as recommended by government



Source: NFER survey of 1176 senior leaders: 929 gave at least one response.

order to support catch-up activity, given that secondary schools were already using their TAs for this purpose before Covid-19 (Skip and Hopwood, 2019).

In terms of the need for additional IT equipment, senior leaders have become particularly aware of the need for improved IT since lockdown, when the limitations of schools' IT systems hindered their ability to communicate with pupils, parents and staff. In addition, the need to separate pupils into bubbles, with minimal circulation of teachers between bubbles, increased the need for schools to invest in IT. One secondary leader said their school needed: 'Resources to stream teachers in to classes where they would usually teach across year groups (webcams, Zoom accounts, Chrome books etc.)'. Arrangements to reduce the risk of infection from equipment that is usually shared by multiple classes and year groups also poses challenges for schools (especially those which had a fixed set of computers for communal use).

The need for additional IT equipment was particularly acute in the most deprived schools. For example, senior leaders in more deprived schools reported requiring three times more funding for IT provision than the most affluent schools As one primary senior leader said:

> *We are in a very deprived area so would need funding to provide children and families with the technical resources necessary for remote learning. We would also need to update our resources in school and provide training for staff.*

Table 3 presents the average additional staff and resources identified by senior leaders in the 78 per cent of schools who said it was not completely manageable to open their schools under these circumstances. These have been calculated as annualised costs. These estimates represent the amount of additional staffing and resources senior leaders estimate they need, as opposed to what schools can actually afford[19]. To put these requirements in context, additional staffing and resource requirements are presented as a share of the expenditure of an average LA-maintained school (see Appendix B for further details of the methods used to provide these estimates)[20]. These comparisons are intended to be indicative, as there are substantial differences between schools which are not captured by estimates based on an 'average school'.

Among the senior leaders who thought it was not completely manageable to open their schools, this table shows that the additional funding requirement represents a sizable increase in total expenditure. In 2018/19[21], approximately 40 per cent of primary and secondary LA-maintained schools were already spending more than their budgets (DfE, 2019a). As one secondary senior leader responding to our survey in July 2020 said: 'We operate with a £500k annual deficit due to sustained budget cuts since 2012. We should not forget the conditions that pre-existed the pandemic: sticking plasters on gaping wounds'. On top of this, school incomes are likely to have been lower in 2020, given that schools earn income from activities such as hiring out facilities, providing services, and catering, that have been impacted by Covid-19.

Although the Government has made it clear that no additional funding will be made available to schools to meet any additional expenditure, other than for helping pupils to catch up with their learning, school funding had already been increased by £2.6 billion for 2020/21, representing a six per cent increase (DfE, 2019f). However, not all schools stand to benefit equally. For example, increases in National Funding Formula (NFF) allocations varied substantially across regions, from less than four per cent in London (3.2 per cent), West Midlands (3.6 per cent) and the North East (3.8 per cent), to five per cent or more in the South West (5.0 per cent) and East of England (5.03 per cent) (DfE, 2019d).

Given these considerations, it is clear that funding increases will not go far enough to meet the additional Covid-related needs of those senior leaders who thought it was not completely manageable to open their schools. As one secondary senior leader commented:

> *We can provide the resources, curriculum management and school leadership but we need cash to cover the increased cleaning alongside the demand to close gaps, whilst maintaining the 'normal' curriculum as best as possible and without additional time.*

However, some of these additional needs will be met through existing government schemes. For example, schools may choose to use the additional funding received through the £650 million catch-up support fund towards hiring an additional teacher or TA[22]. Further, after our survey was conducted, the Government announced additional IT resources for disadvantaged pupils in Years 3-11 which will reduce some of school's

19 There were a large number of senior leaders who were not able to provide a response to this question.

20 Our estimate for expenditure does not account for increases in schools' teacher pension costs since September 2019. As schools have received separate additional funding to meet increases in pension costs, this does not affect the comparability between estimated proportions of average school expenditure and changes in school income.

21 Note that references to years for expenditure in LA-maintained schools refer to financial years, rather than academic years.

22 It should be noted that an average-sized primary school school receiving £80 per pupil as indicated in the government guidance would not be able to afford more than one additional staff member with this funding (DfE, 2020c).

Table 3: Additional staffing and resource estimates by senior leaders who thought it was not completely manageable to open their schools in September 2020

Category	Additional requirement to operate in line with government requirements (annualised costs)	Estimated proportion of an average school's total annual expenditure (%)
Primary		
Number of additional teaching staff	3.7 FTE	9
Number of additional TAs	4.0 FTE	4
Number of additional cleaning staff	2.0 FTE	2
Number of additional support staff	1.4 FTE	1
Cleaning costs	£31,900	2
IT provision	£9500	1
Total cost of additional resources for an average primary school	**£280,100**	**19**
Secondary		
Number of additional teaching staff	13 FTE	5
Number of additional TAs	6.8 FTE	2
Number of additional cleaning staff	6.6 FTE	2
Number of additional support staff	3.9 FTE	1
Cleaning costs	£102,200	2
IT provision	£20,000	0
Total cost of additional resources for an average secondary school	**£720,600**	**12**

Source: NFER survey of 1176 senior leaders: 424 primary senior leaders and 85 secondary senior leaders gave at least one response.

Note: Total expenditure is based on expenditure in LA-maintained schools. We use LA-maintained school expenditure rather than academy expenditure, because the ways in which centralised staff and spending are used to support schools can vary considerably between school trusts, making it more difficult to make comparisons across academy schools.

financial needs for IT equipment in the event of a further lockdown (DfE, 2020d; DfE, 2020e). It is also worth noting that, while senior leaders were asked to provide the amount of additional staffing or financial resources they would need to minimise contact between individuals and maintain social distancing as recommended by DfE, some senior leaders may have reported needs which reflect their schools' situation before Covid-19 (such as existing vacancies). Nevertheless, despite these considerations, there is still likely to be a need for additional funding beyond the current government offer.

3.3 Will schools have the teachers they need?

Prior to the outbreak of Covid-19, schools in England faced a considerable teacher recruitment and retention challenge (DfE, 2018c). The last ten years have been characterised by insufficient numbers of new teachers joining the profession and an increasing proportion leaving the state sector. The period up to 2020 saw a particular shortfall in secondary schools. Recruitment to initial teacher training (ITT) was below target, and retention rates of early-career teachers (between two and five years into their careers) dropped significantly between 2012 and 2018. Alternative sources of teacher supply, such as returners and overseas-trained teachers, have not increased in spite of the growing supply challenge (Worth and Van den Brande, 2019).

Our survey focused on three aspects of recruitment and retention during the Covid-19 pandemic: teacher recruitment, placements for trainee teachers, and whether senior leaders and teachers were planning to leave the profession.

Overall our findings suggest that schools may find it easier to retain and recruit the teachers they need for the 2020/21 school year.

Covid-19 appears to have had minimal impact on plans for teacher recruitment but the move to online methods has changed the recruitment process.

Over half of the 567 senior leaders responding to an open-ended question in our survey said that their plans to recruit teachers in the 2020/21 academic year had not changed as a result of Covid-19.

Some senior leaders explained that their plans had not changed because they had already recruited sufficient teachers before the pandemic and had no further vacancies. However, several of those saying 'no change' commented that they had not needed to recruit any more teachers since March because fewer teachers than expected had decided to leave. This suggests a reduction in the number of teachers they might otherwise have expected to recruit. In line with this, a few of those who had continued to recruit during the pandemic found that the number of applications had increased, suggesting that there was greater competition for the available teaching posts at this time. As one primary leader said: 'It has made it much easier to find good teachers as there are only a few jobs available in the locality. We usually have 7-9 applications. We had 45 this time'.

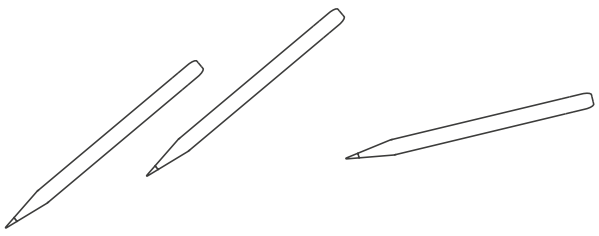
About one in five responding senior leaders said that they continued to recruit the same number as expected, but had changed to an online recruitment process since March. Indeed, the outbreak of Covid-19 appears to have temporarily delayed schools' recruitment of teachers among those seeking to recruit teachers in the spring, while they worked out alternatives to the traditional interview process. A survey conducted in March and April 2020 (Gatsby Foundation, School Dash and Teacher Tapp, 2020) concluded that schools had largely halted their recruitment while they worked out how to recruit through online means.

The key concern for senior leaders responding to our survey who were recruiting teachers remotely was that they were unable to observe the quality of candidates' teaching. They had responded to this challenge in a variety of ways.

- placing greater emphasis on other aspects of the recruitment process, including tasks, interviews and references
- requiring a probationary period and/or issuing temporary contracts
- recruiting 'known' candidates (e.g. ITT students on placement in the school or supply staff)
- delaying recruitment and making alternative arrangements (e.g. by increasing the hours of existing staff or increasing the size of pupil groups).

Concerns over the quality of candidates recruited remotely appeared to be affecting leadership positions in particular. Several senior leaders reported that their school had delayed plans to recruit senior staff, such as head teachers, assistant heads and heads of department, until such time as they would be able to interview them in person.

A few senior leaders said that their schools had decided to increase their teacher recruitment to provide catch up for pupils, which they hoped to pay for from the Government's catch-up funding. On the other hand, a few senior leaders said that they had decided not to replace a teacher in order to offset some of the additional expenditure caused by the Covid-19 pandemic.



'We have still recruited and interviewed online. Has not impacted on our recruitment at all.'

'We have had to virtually interview and go with gut reaction. Luckily we have very few teachers leaving. We will be looking very closely at new staff during their first three month induction and have difficult discussions if we need to.'

'We did not replace a teacher who resigned at May half term, because we didn't want to employ a teacher we couldn't see teach.'

'The headteacher retires at the end of the summer term. Due to Covid, although she announced her retirement in February, the recruitment process had to be postponed. In September the Deputy will take over as Acting Head. This means that the school will be operating on a reduced staff.'

'We cannot recruit new staff as costs of Covid have impacted on funds.'

'We have employed extra maths and English teachers to provide more intervention.'

'We are hoping to retain a teacher who was due to leave so that she can be utilised for the tuition programme but are concerned that information for this has not yet been released.'

Schools have reduced their placements for initial teacher trainees despite growing demand.

Before Covid-19, there was a shortage of teacher trainees, especially in secondary schools.

> *Targets for the required number of secondary teacher trainees have been missed for six years in a row. Increasing numbers of pupils means the trainee target is forecast to continue rising until 2023. The risk of teacher supply getting further behind is high. The system needs more recruitment into training to meet the growing need for teachers.*
> (Worth and Van den Brande, 2019, p.6).

There were 29,580 new entrants starting or expecting to start postgraduate ITT in 2019/20, representing a slight increase on the previous year (DfE, 2019g). One effect of the pandemic in 2020 appears to have been an increase in applications to ITT. Worth (2020) found evidence of a three per cent increase in applications to ITT in April 2020, compared to the previous two years. Figures for July (UCAS, 2020) show that applications for training in England were 15 per cent higher than in the previous two years, but there was no evidence that ITT providers were turning people away, and the number of applicants with at least one offer had reached over 30,000.

However, there are concerns that the increase in applications to ITT has not been matched by an increase in the number of placements offered by schools. A survey of half the 247 school-centred initial teacher training (SCITT) providers in May/June found that school partners were unable to participate in training programmes in 2020/21 (NASBTT, 2020).

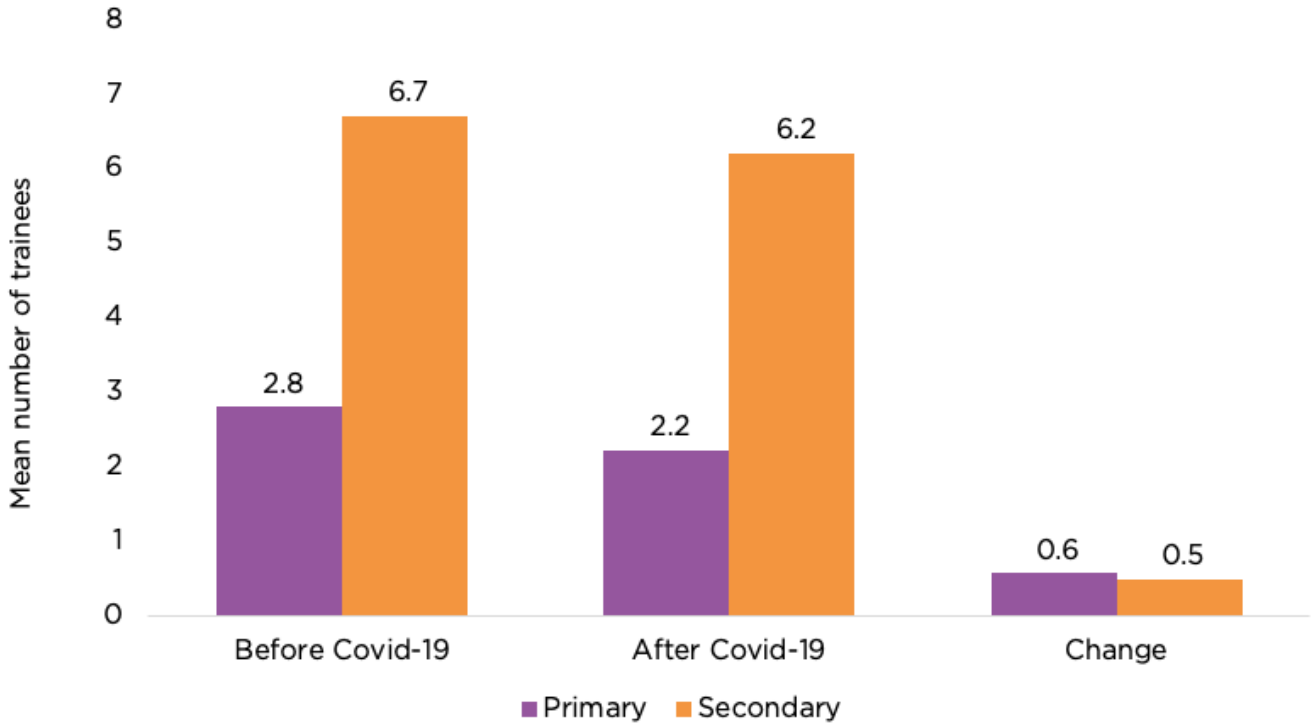
Of the 810 senior leaders responding to our survey question in July 2020, 562 (69 per cent) said their school had been planning to take trainee teachers in the 2020/21 school year; 25 per cent were not and five per cent did not know.

We asked the 562 senior leaders whose schools were planning to take trainees in the 2020/21 school year before Covid-19, how many trainees they were now planning to take (i.e. in July 2020). Of the 546 who responded, almost three-quarters (73 per cent) said they were still planning to take the same number of trainees, a quarter (25 per cent) were planning to take fewer, and only about three per cent were planning to take more. Amongst schools taking fewer trainees, some had dropped the number considerably — for example from between three and five to none. This equates to an overall reduction of 0.6 trainees in primary schools and 0.5 trainees in secondary schools as shown in figure 11. There were no significant differences in senior leaders' responses to this question in relation to the deprivation of their school.

This situation may be temporary and schools may decide to increase their ITT places again in future as the impact of Covid-19 reduces. However, it will be more challenging for ITT providers to re-establish contact with the 14 per cent of senior leaders who reduced their trainee places to zero in 2020/21.

> The percentage of senior leaders and teachers planning to leave the profession has halved since 2019

Figure 11: Number of teacher trainees schools were planning to take in 2020/21 before and after Covid-19



Source: NFER survey of 1176 senior leaders: 440 primary and 114 secondary leaders whose schools were intending to take trainees provided at least one response.

'No students are being taken on to allow staff to manage what will already be an increased workload caused by the increased needs of the pupils and the need to manage their online learning platform.'

'School is not planning to accept trainees in the Autumn Term as the challenges of the term are too much to be having to support a trainee and we don't think it would be fair on the trainee as schools are currently trying to sort themselves without having to support someone new to education. School is considering having trainees in the Spring and Summer but this will depend on the how school is functioning after the Autumn Term.'

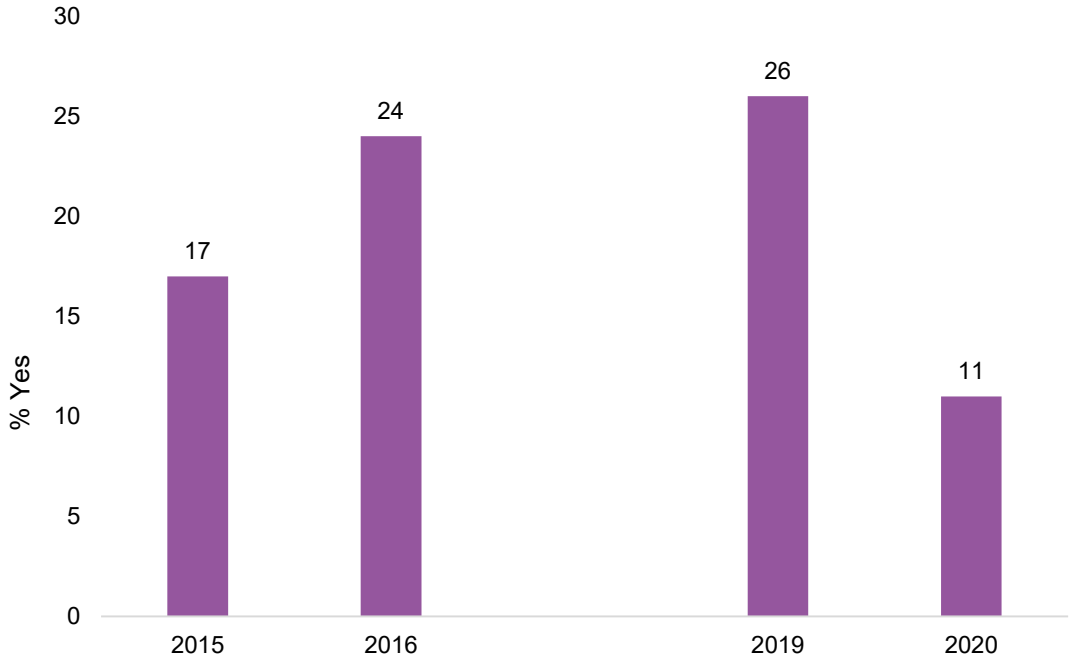
'We are keen to work with ITT providers to support trainees and as part of our long term succession planning.'

The percentage of senior leaders and teachers planning to leave the profession has halved since 2019: 26 per cent said they were planning to leave in summer 2019 compared with 11 per cent in summer 2020. A reduction of this magnitude would more than compensate for the previous shortfall in the number of teachers needed to meet demand.

One of the common effects of economic insecurity is that people tend to stay in their current employment (Carrillo-Tudela *et al*., 2016). It is too soon for the effects of Covid-19 to show up in the official statistics, but a survey in March/April 2020 (Gatsby Foundation, School Dash and Teacher Tapp, 2020) suggested that many current leaders and teachers who may have considered leaving the profession or moving schools had decided not to do so.

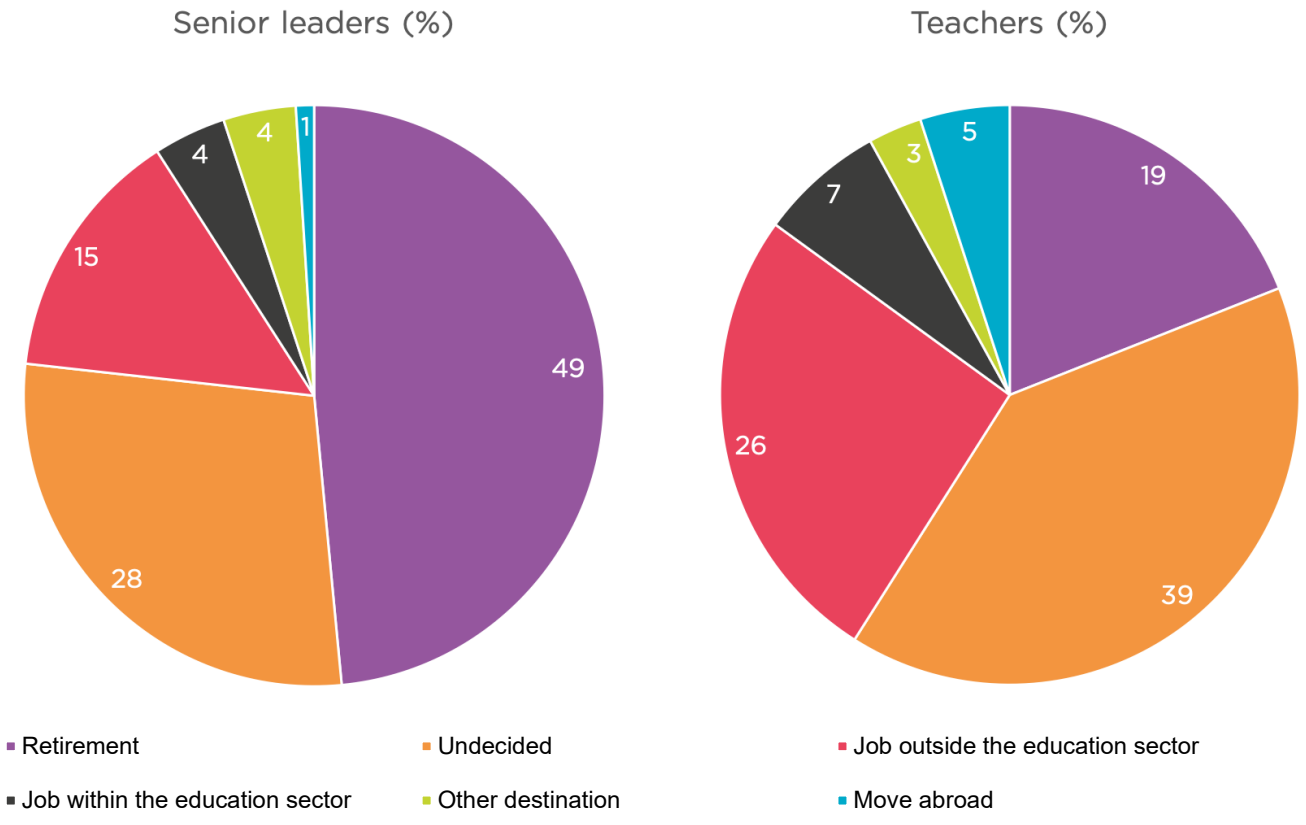
The shortfall in the number of new teachers recruited to teacher training has been around 3000 per year (DfE, 2019b). Compensating for this shortfall would require a reduction of eight per cent in the current number of teachers leaving the profession (DfE, 2020h). Of course, more people consider leaving than actually do, but it is possible to identify trends in intention to leave the profession through a series of surveys.

Figure 12: Percentage of senior leaders and teachers considering leaving the profession in the following academic year



Sources: Figures for 2015 and 2016 taken from Wespieser and Des Clayes, 2017. Figure for 2019 taken from NFER, 2019. Figure for 2020 taken from NFER survey of 1176 senior leaders and 1782 teachers in July 2020: 2376 responded.

Figure 13: Destinations of senior leaders and teachers considering leaving the profession



Source: NFER survey of 1176 senior leaders and 1782 teachers in July 2020: 97 senior leaders and 183 teachers responded[23].

23 'Other destination' represents two other response options ('raise a family/childcare' and 'study').

Most teachers who leave the profession do so in August, having handed in their resignation by 31 May (DfE, 2018b). Our survey in July 2020 found that 11 per cent of teachers and senior leaders were considering leaving the profession[24]. This represents a drop of over 50 per cent compared with 26 per cent of teachers and senior leaders surveyed in June 2019 who said they were thinking of leaving teaching (NFER, 2019)[25]. If replicated nationally, this would more than make up for the shortfall in the number of teachers needed to bring schools to full capacity, though it does not ensure that schools will be able to fill posts in shortage subjects, or address all the potential additional demands created by Covid-19.

We asked the 97 senior leaders and 183 teachers who were considering leaving what they would do instead. Their answers provide an indication of the firmness of their intentions, as those with a clear destination in mind are more likely to leave. Figure 13 shows the intended destinations of senior leaders and teachers. Overall 35 per cent were undecided (which indicates that they may not, in fact, leave the profession in the near future) and 29 per cent were intending to retire.

A higher proportion of teachers (39 per cent) were undecided about their destination than were senior leaders (28 per cent). In contrast, almost half (49 per cent) of senior leaders who were considering leaving were intending to retire; this was significantly lower among teachers (19 per cent).

NFER (2019) asked a similar question[26] of respondents who were considering leaving in the previous year. At that time:

- around 40 per cent of senior leaders and 49 per cent of teachers were undecided
- 29 per cent of leaders and 14 per cent of teachers considering leaving were intending to retire
- 12 per cent of senior leaders and teachers were planning to move to other jobs in the education sector
- 12 per cent of senior leaders and 18 per cent of teachers were planning to move to a job outside the education sector.

Comparing the results of the two surveys suggests that fewer of those who were intending to leave teaching in 2020 were undecided about their destinations and more were intending to retire. Fewer, in 2020, were intending to move to another job within the education sector, but a larger percentage were planning to move to a job outside education, especially among teachers (18 per cent in 2019 and 26 per cent in 2020).

We expected retirement to feature more among senior leaders than teachers, because senior leaders have an older age profile. But the 2020 results could also indicate that retirement has become a more attractive choice for some older senior leaders since Covid-19 – possibly due to health and well-being concerns being heightened by the pandemic. Our earlier research on Covid-19 in May highlighted that 41 per cent of senior leaders were working more than 50 hours per week; a quarter were finding their workload unmanageable; and 31 per cent were not satisfied with their jobs (Walker *et al*., 2020).

3.4 Future learning priorities, catch-up support and plans for using government funding

This section focuses on how senior leaders and teachers are preparing for the new school year.

3.4.1 Future learning priorities

Senior leaders' three top priorities for September are to support pupils' emotional and mental health and well-being (81 per cent); re-engage pupils with learning (64 per cent); and settle them into school (63 per cent).

Senior leaders' intention to prioritise pupils' well-being and re-engagement with learning in September is likely to reflect the view that pupils need time to settle in and reacclimatise before focusing on academic work. As one teacher said:

> *I feel that once students are back in school, they will be able to catch up. School is a great leveller and so although there might exist gaps currently, this will close as soon as they start engaging in the curriculum. From the Government, I would like to see support for students' mental health and well-being. I think this is going to be more of an issue than curriculum gaps.*

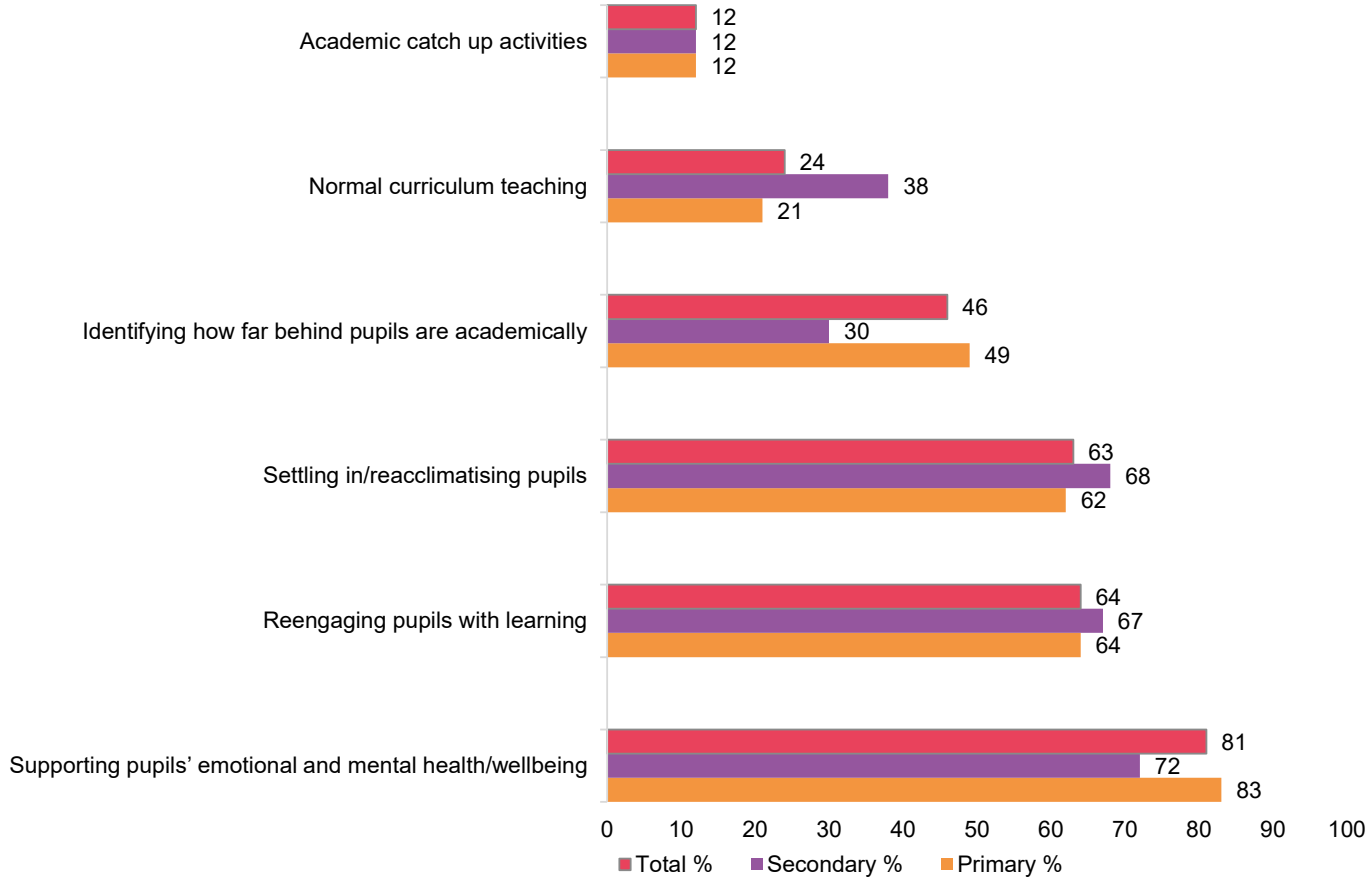
Fewer senior leaders said they would focus on identifying how far pupils are behind academically, normal curriculum teaching, or academic catch up,

24 There was no significant difference in the percentage considering leaving the profession by role or phase.

25 These surveys are comparable because they asked very similar questions, took place in the summer term and provided nationally representative results. We have reported the responses to this question including missing values, for comparability with previous surveys.

26 The 2019 survey used the same wording but an open-ended format whereby respondents typed in their answers. The 2020 survey used a 'closed' format which presented respondents with a set of possible destinations.

Figure 14: Senior leaders' key priorities for pupils on return to school in September by phase



Source: NFER survey of 1176 senior leaders: 929 gave a response: 778 from primary schools and 151 from secondary schools.

though these may well be priorities for later in the school year.

Primary leaders (83 per cent) were significantly more likely than their secondary counterparts (72 per cent) to prioritise supporting pupils' emotional and mental health and well-being, and identifying how far behind pupils were academically (49 per cent compared to 30 per cent).

Senior leaders in the most deprived schools were more likely to concentrate on re-engaging pupils with learning (72 per cent, compared with 56 per cent in the least deprived schools). They were less likely than leaders from the least deprived schools to prioritise normal curriculum teaching in September (18 per cent of leaders in the most deprived schools, compared with 37 per cent in the least deprived schools). This may reflect the lower levels of pupil engagement with learning during lockdown in disadvantaged schools (Lucas *et al.*, 2020) and the lower attendance of pupils in disadvantaged schools during the summer term (see Chapter 2).

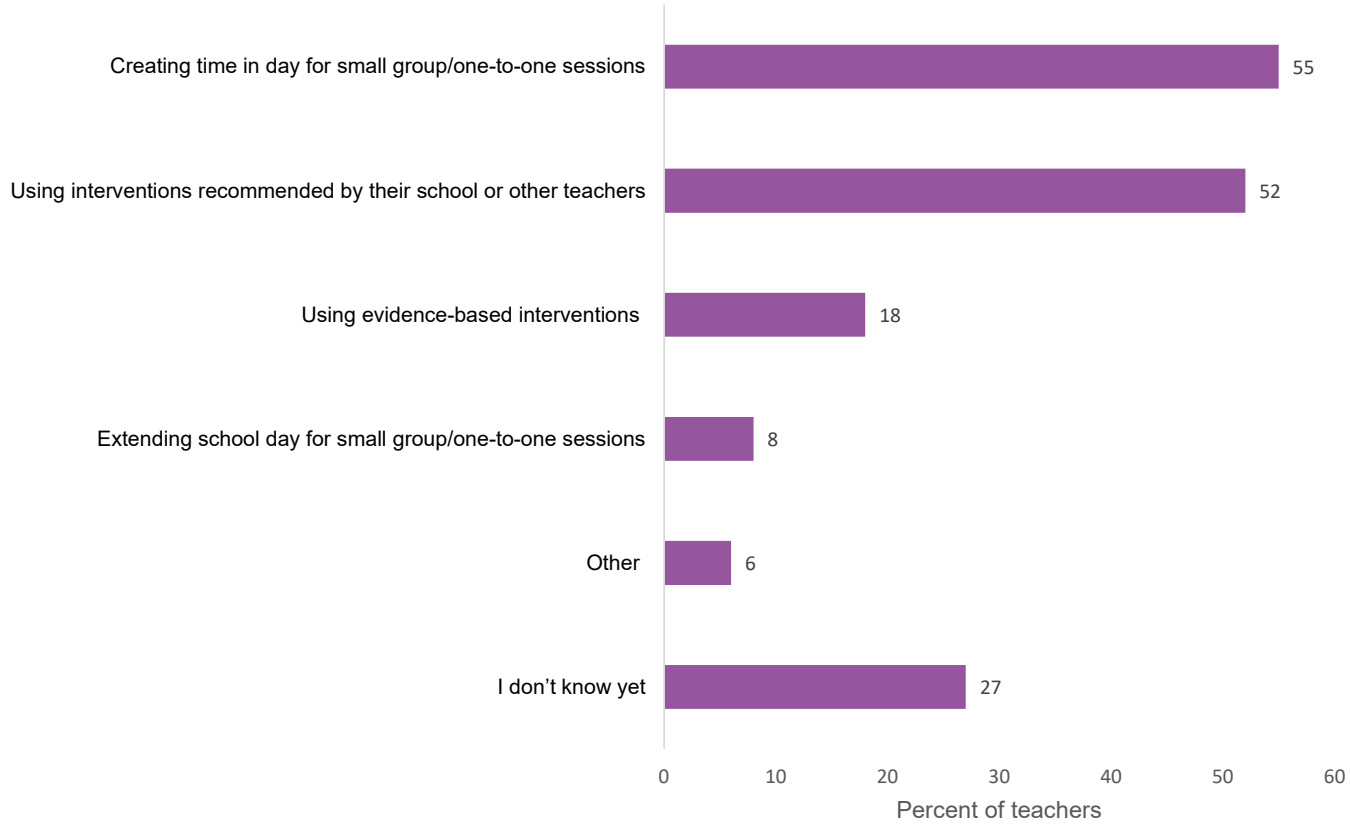
3.4.2 Catch-up support

Most teachers (77 per cent) anticipate using mainly informal assessment methods to identify learning gaps in September, while fewer than one in five (18 per cent) intend to use external assessments that compare pupils against a national benchmark to identify learning gaps.

There has been some debate about the scale of missed learning as a result of Covid-19 (see, for example Royal Society DELVE Initiative, 2020 and EEF, 2020d). This research aimed to gather teachers' estimates of the extent of curriculum learning loss (see Chapter 2), as well as the methods teachers might use to establish pupils' learning needs in the autumn term of the 2020/21 school year.

Teachers were planning to use a variety of methods to identify pupils' curriculum learning gaps, although five per cent indicated that they did not expect to be assessing the extent of pupils' learning gaps in September. The survey found that secondary teachers (85 per cent) were significantly more likely to use informal methods of teacher assessment to identify learning gaps than primary teachers (76 per cent).

Figure 15: Teachers' intended approaches to help pupils with large gaps to catch up



Source: NFER survey of 1782 teachers: 1633 teachers gave at least one response.

Conversely, primary teachers (20 per cent) were significantly more likely to use external assessments to identify learning gaps than secondary teachers (nine per cent).

We asked teachers which approaches, from a list[27], they intended to use in September to help pupils with large gaps to catch up. The question included several of the strategies recommended by EEF (2020b).

About half of teachers (55 per cent) intend to create time in the day for small-group or one-to-one sessions to support pupils with relatively large gaps in their learning. They also plan to use interventions recommended by their school or other teachers (52 per cent) as shown in figure 15.

Primary teachers (61 per cent) were significantly more likely to plan to create time for small group and one-to-one sessions within the school day than their secondary counterparts (25 per cent), possibly because primary schools are used to providing additional targeted support in this way. Primary teachers were also significantly more likely to use evidence-based interventions[28] [29] (such as the Education Endowment Foundation's 'Promising Projects') (19 per cent) than secondary teachers (13 per cent).

Fewer teachers said they would use other approaches to catch up recommended by EEF (2020b), such as extending the school day. Only eight per cent of teachers overall said their schools intended to extend the school day to provide time for small-group or one-to-one sessions, although this was significantly higher among secondary teachers (21 per cent) than primary teachers (five per cent). It is possible that extending the school day is felt to be more suited to older pupils and is considered the most productive way to introduce small-group and one-to-one sessions into secondary schools. It is also possible that some secondary schools were already planning to extend the school day for logistical reasons, to allow for greater social distancing among large numbers of pupils.

27 Creating time in the school day for small-group or one-to-one sessions; using evidence-based interventions (e.g. the Education Endowment Foundation's 'Promising Projects'); using interventions recommended to me by my school or other teachers; extending the school day to provide time for small-group or one-to-one sessions.

28 School interventions informed by evidence.

29 Recommendations from the school or other teachers may well also be 'evidence-based', but not identified as such by the teachers in the survey.

In July, 27 per cent of teachers said they did not know which approaches they would use to help pupils with large gaps to catch up in September. Secondary teachers were significantly more likely to say they did not know (37 per cent) than their primary counterparts (25 per cent). This indicates the fast-moving nature of the situation, the uncertainty around opening schools more fully, and the need for schools to plan for this early in the new term.

3.4.3 Plans for using government funding

Approximately half of senior leaders favoured using the £650 million catch-up funding for small-group and one-to-one tuition or to deliver targeted academic intervention programmes. Around a third intended to use it for providing mental health/well-being support.

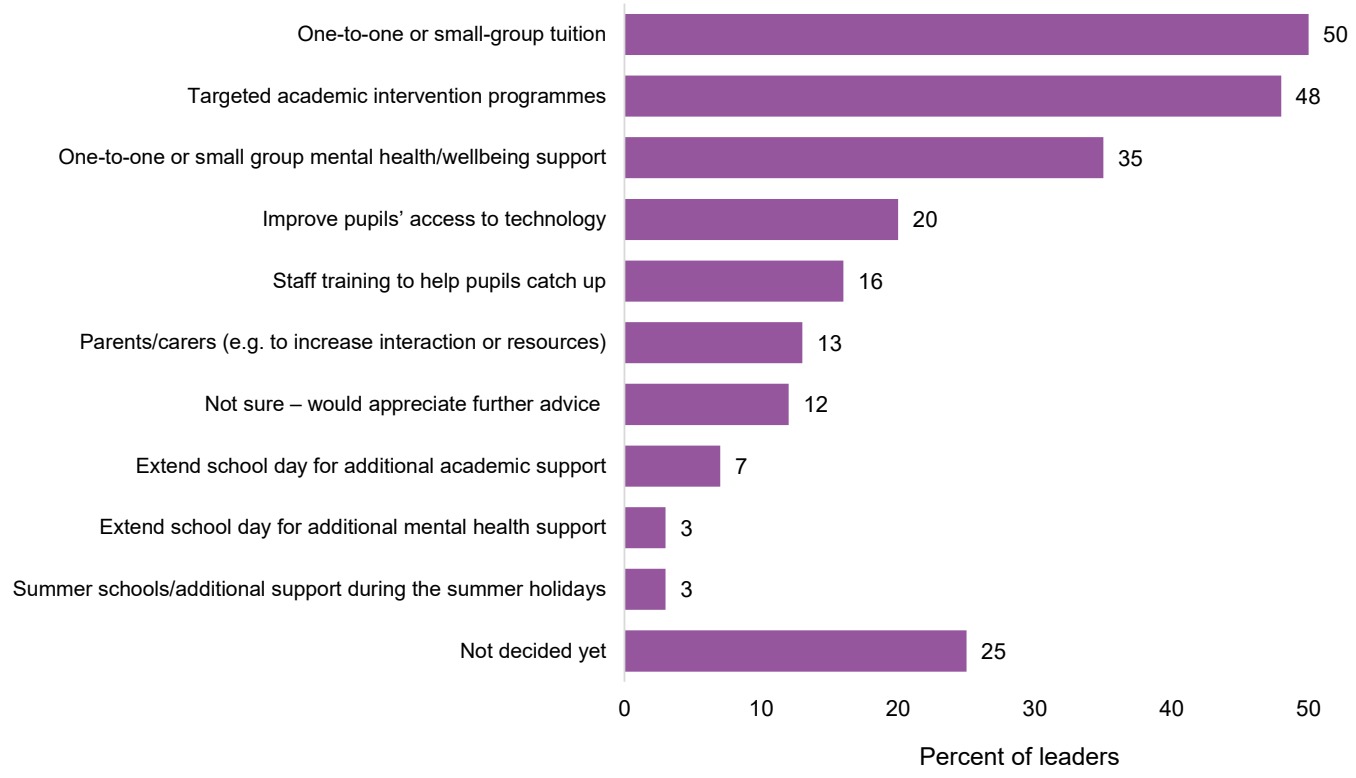
The £650 million universal catch-up premium is a one-off payment for the 2020/21 academic year, aiming to ensure that all schools have the support they need to help all pupils make up for lost teaching time. The DfE guidance (DfE, 2020c) states that schools have the flexibility to spend their funding in the best way for their cohort and circumstances. However, an accompanying support guide (EEF, 2020b) encouraged schools to use both universal and more targeted approaches, including small-group or one-to-one tuition, evidence-based intervention programmes and extended school time.

We asked senior leaders how they intended to spend their share of the fund. Although 25 per cent had not decided yet and 12 per cent were uncertain, around half (50 per cent) of senior leaders thought they would spend it on providing one-to-one or small-group tuition and/or delivering targeted academic intervention programmes (48 per cent). Around a third (35 per cent) intended to use it for providing mental health/well-being support, either individually or in small groups. Figure 16 provides further details on the ways in which senior leaders intended to spend the fund.

There were several differences between primary and secondary leaders in their responses to this question. Primary leaders (36 per cent) were significantly more likely to anticipate spending the funding on providing pupils with mental health/well-being support than their secondary colleagues (28 per cent), which is consistent with primary leaders' intention to prioritise supporting pupils' emotional and mental health and well-being in the 2020/21 academic year (see above).

Secondary leaders were significantly more likely to prioritise catch-up funding for: improving pupils' access

Figure 16: Leaders' thoughts on how to spend their share of the £650 million catch-up fund



Source: NFER survey of 1176 senior leaders: 940 gave at least one response.

to technology; extending the length of the school day for additional academic support; funding summer schools/ additional support during the summer holidays; and extending the length of the school day for additional mental health and well-being support.

Secondary leaders appeared to be considering more options for spending the universal catch-up premium than their primary counterparts. This may reflect the greater amount of funding available to secondary schools and the different priorities for older pupils, for example, improving pupils' access to technology is crucial for older pupils, and extending the school day may be a more popular choice for leaders of secondary schools.

In July, over a quarter of leaders were undecided about how they intend to use the funding, which suggests a need for planning and decision-making for the new school year.

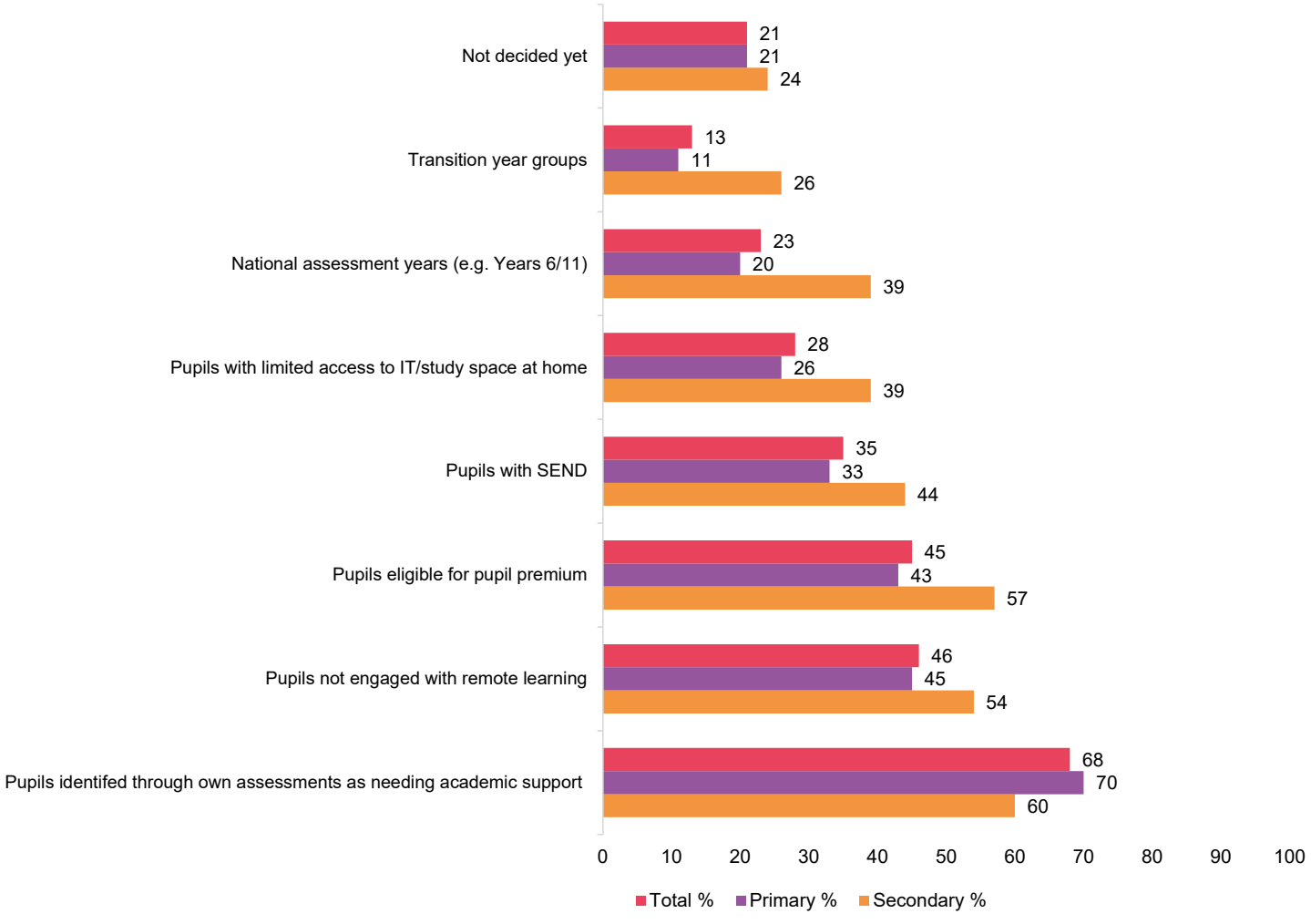
There was also one difference by level of deprivation. Leaders in the most deprived schools (nine per cent) were significantly more likely to fund summer schools/ additional support during the summer holidays than leaders in the least deprived schools (two per cent).

We also asked senior leaders which groups of pupils they were likely to prioritise for support. The question listed seven possible groups of pupils as shown in Figure 17 below.

Just over two-thirds (68 per cent) of senior leaders said they were likely to prioritise support for individual pupils, especially those identified through their own assessments as needing additional academic support. Fewer senior leaders wanted to prioritise support for whole year groups.

Significantly more primary leaders (70 per cent) said they were likely to prioritise pupils for additional academic support through their own assessments than secondary leaders (60 per cent). On the other hand, significantly more secondary leaders said they would prioritise groups of pupils (for example pupils eligible for the Pupil Premium or pupils with SEND) than primary leaders, as illustrated in Figure 17.

Figure 17: The pupils that leaders intended to prioritise for additional support, by school phase



Source: NFER survey of 1176 senior leaders: 938 gave at least one response.

It appears that schools wanted to identify which individuals need the greatest support. Such a needs-led approach will take time to implement and mean that governors, multi-academy trusts and local authorities should be prepared to monitor the situation over time.

In terms of deprivation, senior leaders in the most deprived schools (34 per cent) were significantly more likely to prioritise support for national assessment year groups (e.g. Year 6 and Year 11) than senior leaders in the least deprived schools (20 per cent). On the other hand, senior leaders in the least deprived schools were significantly more likely to prioritise:

- individual pupils identified through our own assessments as needing additional academic support (76 per cent) than senior leaders in the most deprived schools (67 per cent)
- pupils who have not engaged with remote learning (57 per cent) than senior leaders in the most deprived schools (45 per cent)
- pupils eligible for the Pupil Premium (52 per cent) than senior leaders in the most deprived schools (42 per cent).

It is possible that leaders in the most deprived schools need to focus on all their pupils, whereas leaders in the least deprived schools wish to prioritise particular groups and individuals for support (for example, the minority of pupils who have not engaged with remote learning).

Nearly two in five senior leaders were intending to access the £350 million National Tutoring Programme (NTP) for disadvantaged pupils, but just over half were undecided whether to access the fund.

The Government has launched a £350 million NTP to provide additional, targeted support for disadvantaged and vulnerable pupils (£76 million of which has been allocated to EEF for the Tuition Partners pillar). Schools are expected to subsidise at least 25 per cent of programme costs.

Thirty-eight per cent of senior leaders responding to our survey said they intended to access the NTP; five per cent did not have eligible pupils; three per cent did not believe that disadvantaged pupils would benefit from it; and 54 per cent were undecided. This level of uncertainty may reflect leaders' current concerns about the details of the package and how much of the fund is ultimately destined for schools.

Secondary leaders (44 per cent) were significantly more likely to agree that they intended to access the NTP than primary leaders (37 per cent). As expected, given the targeted nature of the fund, senior leaders in the most deprived schools (49 per cent) were significantly more likely to say they intended to access it than senior leaders in the least deprived schools (29 per cent). Senior leaders in the least deprived schools (58 per cent) were significantly more likely to say they had not yet decided if they would access the NTP than leaders in the most deprived schools (46 per cent).

We asked the 548 senior leaders who did not intend to access the NTP, or who were undecided, about their concerns.

Senior leaders who had not yet decided to access the NTP had a number of concerns, including using tutors unfamiliar to pupils; having insufficient budget to contribute to the cost of tutoring; the quality of tuition content; the quality of tutors; and the alignment between tutoring and in-house teaching.

As over half of senior leaders were unsure about accessing the NTP, there is scope for NTP providers to provide further information and reassurance on the benefits of the NTP and targeted tutoring, focused on addressing the key barriers identified in this research.

Primary leaders were significantly more likely to be concerned[30] about:

- having insufficient staff capacity to make the application (29 per cent of senior leaders in primary schools were concerned about this to a great extent, compared with 19 per cent of secondary senior leaders)
- being unsure whether pupils will engage with this support (42 per cent of primary compared with 35 per cent of secondary senior leaders).

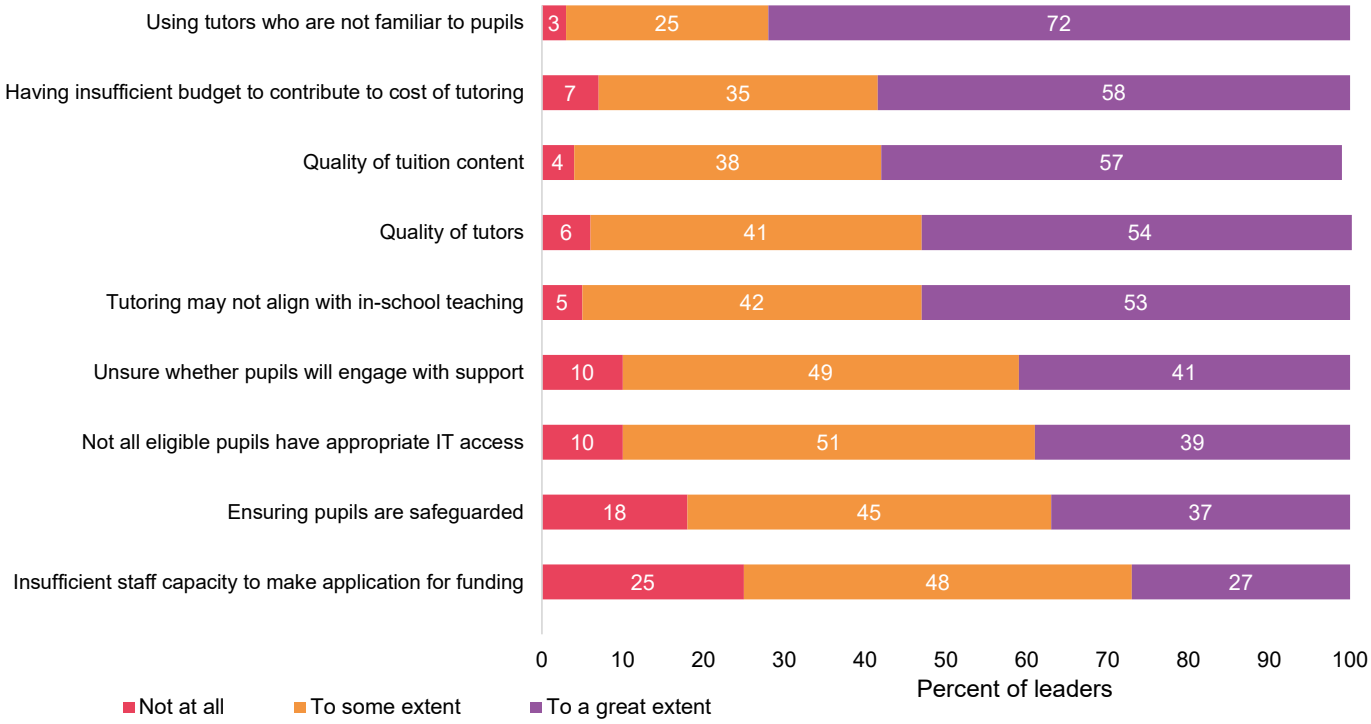
Primary leaders may be more concerned about a lack of staff capacity to complete the application, as this places a greater burden on smaller schools with fewer staff.

Senior leaders in the most deprived schools were significantly more concerned about:

- not all pupils having appropriate IT access (60 per cent of leaders in the most deprived schools compared with 19 per cent in the least deprived schools).

30 Respondents were asked to what extent they shared the concerns listed in the question (see Figure 18). These findings are based on the percentage of senior leaders who said they were concerned 'to a great extent'.

Figure 18: School leaders' concerns about the NTP



Source: NFER survey of 1176 senior leaders: 514 of the leaders who had decided not to access NTP or were undecided gave at least one response.

- being unsure whether pupils will engage with this support (53 per cent of senior leaders in the most deprived schools compared with 30 per cent in the least deprived schools).

Senior leaders of more deprived schools had higher proportions of pupils lacking IT access. Their concerns about a lack of IT access providing a potential barrier to pupils receiving tutoring are likely to stem from this. We also know that pupil engagement was lower in more deprived schools during lockdown (see Lucas *et al.*, 2020), so this may prove to be a greater issue for the most deprived schools when contemplating the NTP. This concern may be partially alleviated if schools are able to access IT equipment from the Government for disadvantaged pupils, but the additional resource will only be available if schools have to close due to an increase in Covid-19 infections, or for clinically extremely vulnerable children who are shielding or self-isolating (see DfE, 2020e).

3.4.4 Additional needs for September

In terms of preparing for opening schools more fully in September, we asked teachers and senior leaders an open-ended question on what one thing they need from government to help them manage the impact of Covid-19 on their school, pupils and their families.

Overall teachers and leaders top requests were for the Government to provide more funding and clear guidance, in order to help them manage the impact of Covid-19 in schools in September.

The top priority for senior leaders and teachers in helping to manage the impact of Covid-19 was for the Government to provide more funding. About a third of senior leaders and about a fifth of teachers answering this open-ended question wanted more funding in general and especially for teachers and TAs. This echoes the findings from our questions about the additional funding senior leaders wanted to manage the additional demands on their school budgets as a result of the pandemic (see Section 3.2). As one senior leader said, they wanted: 'More money (no strings attached, no caveats, etc.) in the budget for us to manage the situation as trusted professionals'.

At the time the survey took place, the Government had recently published guidance to schools on resuming full operation in September (DfE 2020e), but the survey took place before the Government issued updated guidance[31] in August. In July, about a quarter of senior leaders called for the Government to provide clearer, detailed and consistent guidance on a range of topics.

31 The updated guidance included information on a number of topics including risk management, cleaning, and children with EHCPs.

‘Make guidance readily available. Keep it simple and clear. Minimise updates. Listen to school staff on the front line as to what is possible.’

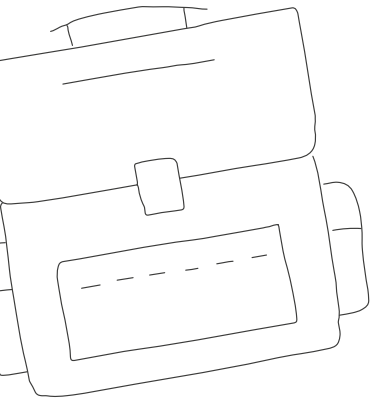
‘The DfE guidance is so vague and open to interpretation.’

‘There are many things that we require but the one that stands out is - clearer guidance from the DfE about opening and the catch-up curriculum.’

‘Clarity regarding easing of lockdown rules and when changes might occur.’

‘More/clear guidance on the curriculum amendments or key focus statements which must be targeted nationwide and how best to support our poorer/SEND/Pupil Premium pupils.’

Reducing external pressure in the form of national assessments and accountability (for example, from Ofsted) was also a popular request among both teachers and senior leaders, whose main concern was to lessen the pressure of external accountability at a time when they needed to prioritise ‘recovery’.



‘Reconsider national testing for next year or at the very least let the assessments reflect the lack of input particularly for the children of Year 6 in 2020/21.Thresholds for standardised scores should reflect the fact this group of children were not brought back to school.’ (Senior leader)

‘Remove stress of national tests (SATs) and let pupils focus on recovery.’ (Teacher)

‘Get rid of the SATs and the pressure that comes with it so that we can truly focus on identifying gaps and help children learn, rather than worrying about what might come in tests.’ (Teacher)

‘ESSENTIAL: Suspension of ALL accountability measures (Ofsted, league tables etc.) so that we can give 100% focus to the process of recovery.’ (Senior leader)

3.5 Preparing for alternative scenarios

A recent study (Panovska-Griffiths *et al.*, 2020) argued that, in the absence of a fully-functioning test, track and isolate system, there is a high likelihood of ongoing periods of local lockdown and, potentially, a second wave of infection with another full national lockdown. Schools need to know what to do in such circumstances, and plans need to be in place to ensure that they are in a strong position to offer high-quality remote learning, or blended learning, depending on the circumstances. It is critical to avoid ‘crisis responses’ to different scenarios; rather, each should be anticipated and planned for. Education unions have called on the Government to have a ‘Plan B’ in place for schools opening in the autumn, in the event of future episodes of local or national lockdown, or a need for partial opening supported by blended learning (ASCL, 2020; NASUWT, 2020; NEU, 2020).

The findings from our research will help with this planning, indicating where the challenges were in June and July 2020 and how these can be mitigated in the upcoming school year.

3.5.1 Balancing remote and in-school provision

This section considers the extent to which schools found providing a mixed diet of in-school and distance learning manageable in June and July 2020. It explores what worked well and the challenges that schools encountered which are relevant to future periods of lockdown.

At a time when the majority of pupils were still learning from home, school staffing capacity was largely deployed towards in-school provision.

According to DfE estimates (2020b), the majority of pupils in primary and secondary schools were learning at home in July. Daily attendance rates for primary pupils in Reception, Year 1, and Year 6 stabilised at around 40 per cent in July, while attendance rates for secondary pupils in Year 10 and Year 12 stabilised at around 13 per cent. This illustrates that a large majority of pupils each day were at home rather than in school and there was a continuing need for remote learning support.

We asked senior leaders a question about the balance of their staffing support for in-school versus remote learning. Figure 19 shows that the majority of respondents (55 per cent) said they had a balanced focus. However, across all schools (see the total bars in the figure), those that specified a tendency to focus more on one aspect than the other tended more towards a focus on in-school provision (34 per cent) than remote learning provision (11 per cent).

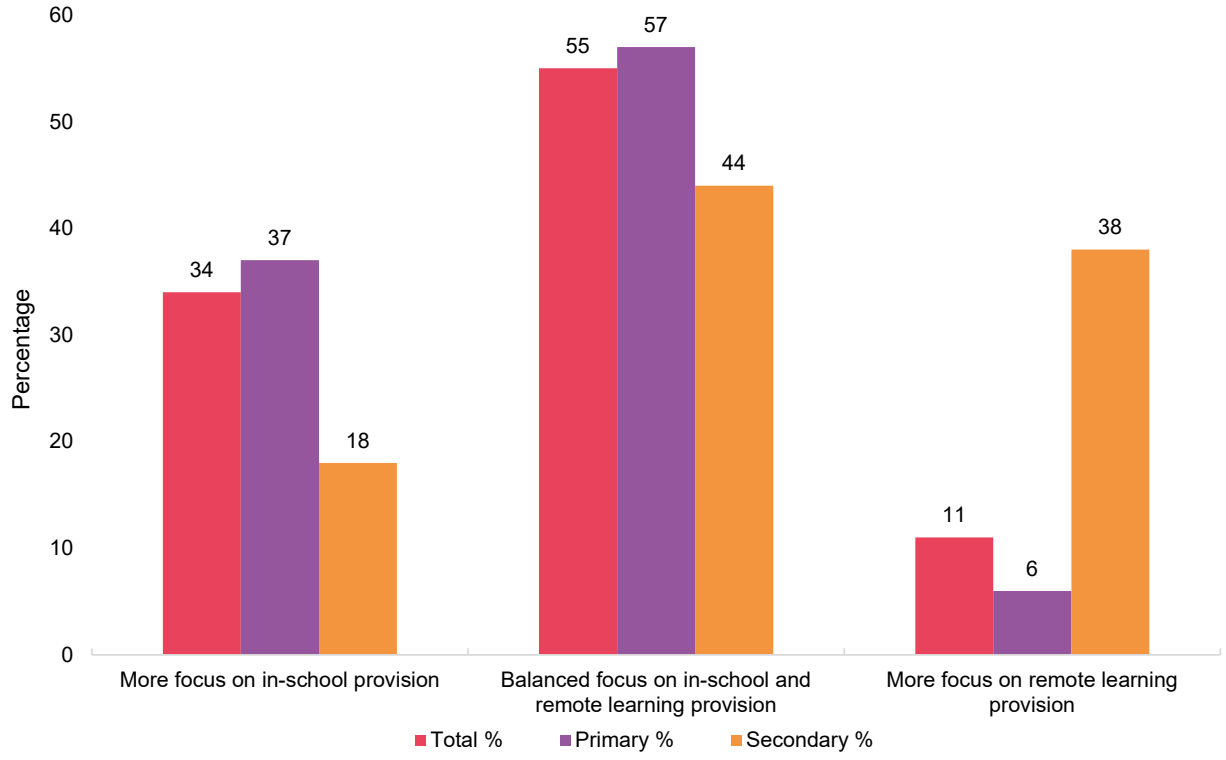
This was particularly the case in primary schools (37 per cent had more focus on in-school provision, while only six per cent had more focus on remote learning support). Staffing capacity was therefore skewed heavily in favour of in-school provision in the primary sector.

Secondary schools had more focus on remote learning support than in-school provision (38 compared to 18 per cent). According to DfE attendance records (2020b), daily attendance rates across all Year 10 and 12 pupils stabilised at around 13 per cent in July (equivalent to 26 pupils in a year group of 200 pupils), yet 18 per cent of secondary leaders told us that they were focusing more staffing resource on in-school provision.

In spite of this pattern of staff deployment, senior leaders were moderately confident about their schools' ability to balance the needs of pupils learning remotely with those learning in school.

The majority of senior leaders (62 per cent) felt that they

Figure 19: Balance of staffing support for in-school and remote learning



Source: NFER survey of 1176 senior leaders: 909 gave at least one response.

were managing the balance between the needs of both groups of pupils to a moderate extent. However, only three in ten (30 per cent) were able to say that they were managing this balance to a great extent or completely. Senior leaders were generally confident that they had teachers with the right specialisms, by subject or year group, available to support pupils who were learning in school and those that were learning remotely. This is surprising given the extent to which schools were using TAs to lead classes (see Section 2.4.2).

Senior leaders believed that 86 per cent of remote learning support was being provided by teachers with the right specialisms. However, there was a notable difference between schools with high and low levels of deprivation in this regard. Leaders in the least deprived schools were more confident that a high proportion of learning support was being provided by teachers with the right specialisms (91 per cent) than leaders in the most deprived schools (80 per cent).

Despite senior leaders' optimism about their ability to balance the needs of pupils learning remotely with those learning in school, it is clear that there was a mismatch between the proportion of pupils attending school during June and July and the proportion of staff that had been deployed to support them. This was unavoidable given the high demands of providing in-school teaching and supervision for small groups of pupils working in bubbles.

These findings bring into sharp relief the challenge of operating partially opened schools with social distancing in force. They also raise questions about the implications of a selected year-group attendance model for learning equity. It seems likely that most schools were unable to offer high-quality remote learning support to pupils that were based at home in June and July, when so many teachers, and other staff, were deployed to support pupils who were learning in school. Remote learning is likely to continue to be part of schools' support package for some time to come. The likelihood is that some pupils in all schools (for example, those with health vulnerabilities) and all pupils in some schools (for example, in incidences of local lockdown) will need ongoing remote learning support.

Should it become impossible to have all schools open to all pupils at any point in the new academic year, it may be more equitable to consider a model in which all pupils receive distance learning or a blend of remote and in-school learning. Given the findings of our previous report (Lucas *et al*., 2020), government may need to prioritise pupils with economic or learning disadvantages to receive more in-school support within this model.

3.5.2 The quality of remote learning support

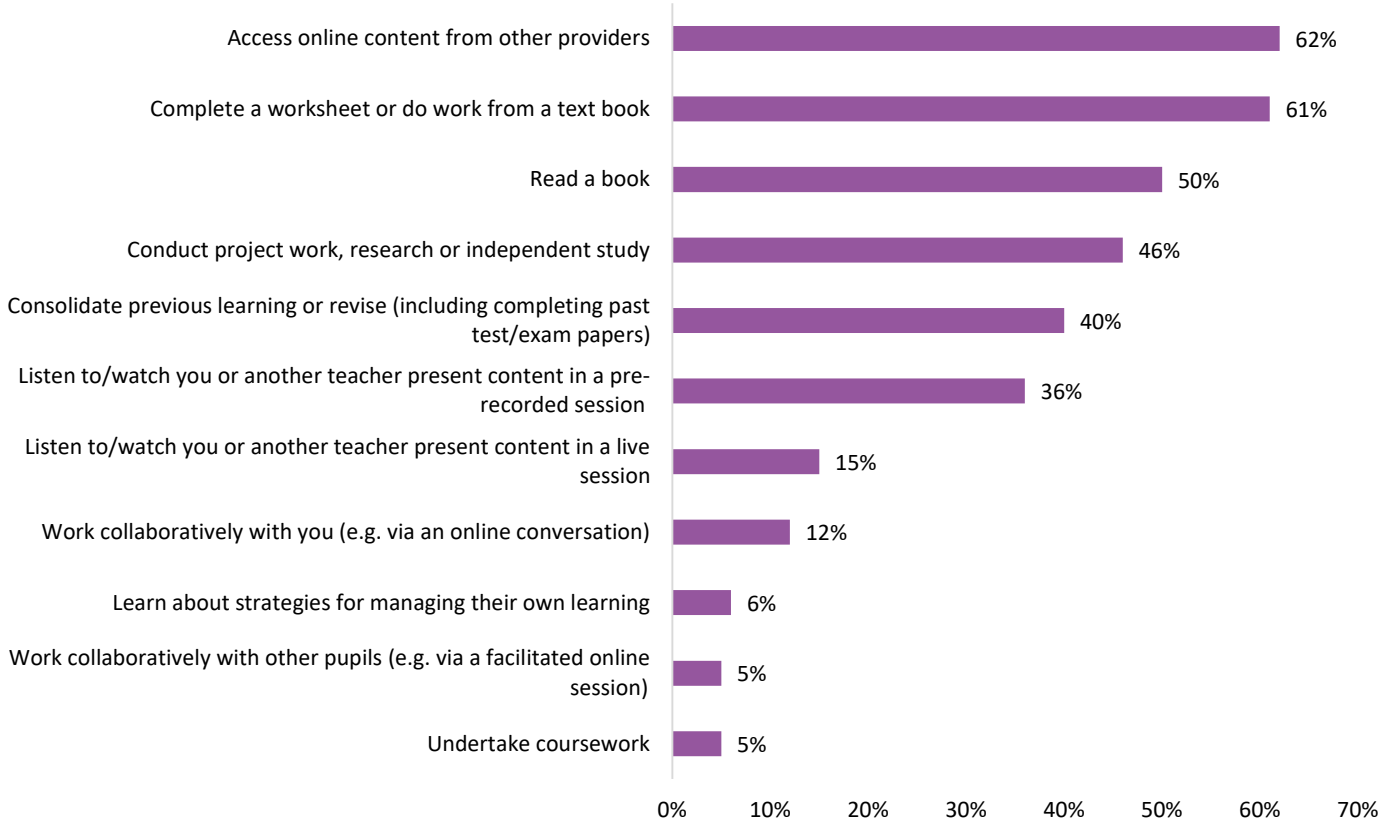
As indicated above, remote learning continued to be a key element of educational provision in July, with 95 per cent of secondary teachers and 82 per cent of primary teachers reporting that they had continued to provide remote learning to some of their pupils.

In July 2020, there was no clear indication that schools were using more interactive forms of teaching and learning than they had been earlier in lockdown.

We asked teachers to think about the most recent learning activity they had set for pupils. Figure 20 shows the variety of learning activities teachers said they provided. The most common involved asking pupils to access content supplied by external providers, to complete a worksheet, to read from a book or to conduct project work, research or independent study.

We asked a similar question in our Wave 1 survey (see Lucas *et al*., 2020). It is important to be cautious in making comparisons between the two waves because, not only was the structure of the question slightly different in each survey, but the schools and teachers responding in each survey wave were also different. However, the pattern of responses across the two survey waves was very similar in terms of the most common learning strategies. 'Live learning' was relatively rare in both surveys. Only 15 per cent of responses in our most recent survey mentioned inviting pupils to join a live lesson, only 12 per cent involved interactive sessions between pupils and teachers, and only five per cent involved pupils working together collaboratively.[32] As in our previous survey, very few teachers (only six per cent) mentioned supporting pupils to manage their own learning (using a self-regulation approach). Live learning, consolidating learning and supporting pupils to self-regulate their learning are all recommended as effective strategies as part of a mixed diet of provision (see EEF, 2020e). These elements should be the key considerations in the online learning plans that schools have been asked to develop by the end of September (DfE, 2020e).

Figure 20: The most recent learning activities teachers provided to their pupils



Source: NFER survey of 1782 teachers: 1457 teachers gave at least one response.

32 In our Wave 1 survey, 24 per cent of responses mentioned inviting pupils to 'listen to/watch you or another teacher present content in a live session', but only six per cent mentioned asking pupils to 'work collaboratively with you (e.g. via an online session)'. The distribution between these two items was different in the most recent survey, but the overall percentage for the two in combination is similar across the surveys.

Interactive forms of remote learning support were significantly more likely to be offered by secondary than primary teachers.

There were note-worthy differences between the remote learning approaches used by teachers in primary and secondary schools. For example, the most frequently cited approaches in Figure 20 were more likely to be offered by primary, than secondary, teachers. These included:

- accessing online content from other providers (65 compared to 48 per cent)
- completing a worksheet or doing work from a text book (63 compared to 49 per cent)
- reading a book (58 compared to 12 per cent).

Conversely, the more active learning approaches, and those that we found in our previous report (Lucas *et al*., 2020) to be positively associated with enhanced pupil engagement[33], were more likely to be offered by secondary teachers. These included:

- consolidating learning or revising (51 compared to 38 per cent)
- listening to/watching a live session (36 compared to ten per cent)
- working collaboratively with teachers (23 compared to ten per cent)
- working collaboratively with other pupils (eight compared to four per cent).

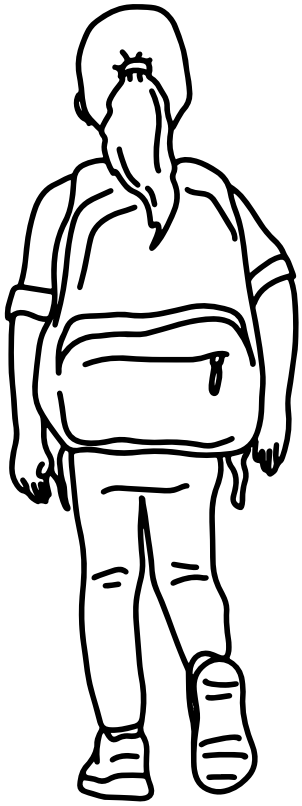
Not surprisingly, secondary teachers were also much more likely to have asked pupils to conduct coursework than primary teachers (16 compared to three per cent).

These patterns appear to relate to the different ages of pupils being supported. Secondary-aged pupils are, at least in principle, more able to manage their own learning, and are more likely to have the technical skills and maturity to engage with live or pre-recorded learning sessions without parental support. Additionally, provided that they live in a family with the economic resources to provide them with a laptop or computer, secondary-aged pupils are much more likely than primary-aged pupils to have already owned their own digital device for regular (pre-Covid-19) learning and homework. The implication of this for schools' remote learning planning is that primary schools need to find ways of engaging parents in remote learning, and may decide to offer a mixed diet of online sessions and offline learning activities.

Additionally, as the section below demonstrates, secondary schools appear to have provided more training for their teachers in how to approach remote learning, than primary schools, which indicates that primary teachers have a greater need for such training.

Secondary teachers were more likely than primary teachers to be receiving training from their schools in how to provide remote learning support to pupils.

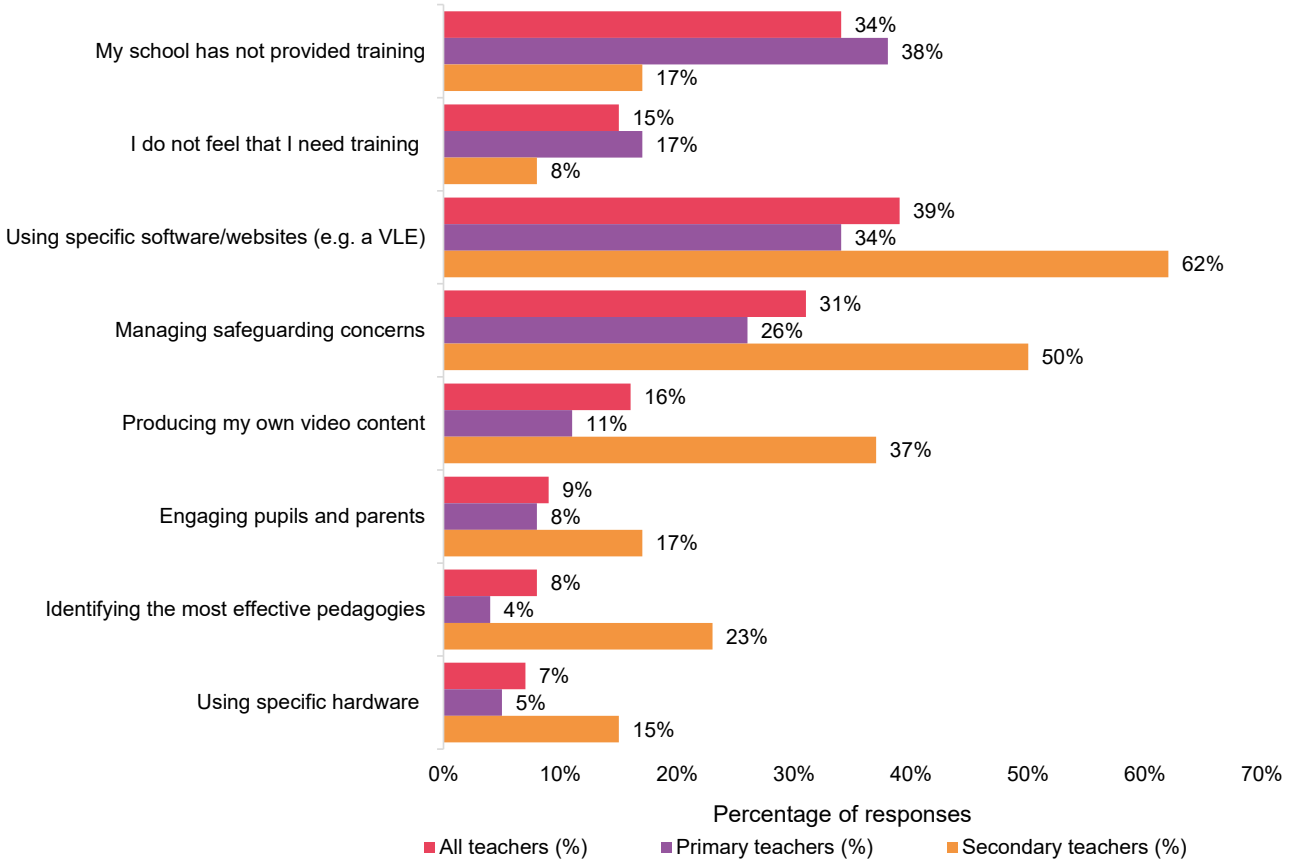
We asked teachers a question about the support their schools had provided on how to approach remote learning. Figure 21 shows that just over a third of teachers had not received any training at all. This was significantly more likely to be the case for primary than secondary teachers – 38 compared to 17 per cent. In addition, 15 per cent of teachers reported that they did not need any training[34] - again, this sentiment was significantly higher among primary than secondary teachers – 17 compared to eight per cent. This may be a reflection of the nature of remote learning provided by primary schools as compared to that provided by secondary schools.



33 'Working collaboratively with you via an online conversation' and 'consolidating previous learning or revising'.

34 These two categories were not mutually exclusive. Some of the teachers whose schools had not provided training also said that they did not need training.

Figure 21: Training received to help provide remote learning support to pupils



Source: NFER survey of 1782 teachers: 1426 teachers gave at least one response.

Figure 21 shows a very clear pattern by phase. It appears that secondary teachers were considerably more likely to have received support in both the technical aspects and the pedagogy of remote learning. The very different proportions of teachers mentioning training for virtual learning environment (VLE) use by phase (62 per cent of secondary compared to 34 per cent of primary teacher responses) is likely to reflect the fact that fewer primary than secondary schools used VLEs as a mechanism to support remote learning (see Lucas *et al*., 2020).

The high proportion of secondary teachers mentioning safeguarding training (50 compared to 26 per cent of primary teachers) is likely to reflect the fact that more secondary teachers were using interactive learning methods with their pupils, and were therefore having to address the complex safety and security challenges that this form of learning entails, for both teachers and pupils. Secondary teachers were also more likely than primary teachers to have received training in producing video content (37 compared to 11 per cent) and in using specific hardware (15 compared to five per cent). This tallies with the earlier finding that secondary teachers were more likely to be engaging in live learning than primary teachers.

More surprisingly, secondary teachers were much more likely than primary teachers to have received training on 'engaging pupils and parents' (17 compared to eight per cent), and on 'identifying the most effective pedagogical practices for remote learning' (23 compared to four per cent). Both of these approaches appear important and relevant, irrespective of whether interactive learning approaches are used. Another surprising finding is that teachers in the least deprived schools were more likely to say that their school had not provided training for remote learning than schools in the other deprivation bands (41 per cent of teachers in the most affluent schools said this, compared to 31 per cent in the most deprived schools).

A third of teachers provided their own laptop or computer to support pupils' remote learning, and three-fifths either supplied their own audio-visual (recording) equipment or had no access to such resources.

A survey by the Sutton Trust (2020) found that pupils in independent schools were significantly more likely than those in state schools (especially the most deprived state schools) to be receiving high-quality interactive remote learning. Well-cited explanations include that

pupils in state schools were less likely to have internet connectivity and digital devices and/or adequate study space in the home than independent school pupils, making this form of learning challenging; and that state schools were less likely to have well-developed learning platforms for the setting and submission of work. Fewer studies have focused on the resources that state-school teachers themselves had to support interactive learning.

We asked teachers a question about the resources they had available to support remote learning. The results are shown in Table 4.

Table 4: Resources at teachers' disposal to support remote learning

Resource	Provided by school (%)	Provided by teacher (%)	No access to resource (%)
Access to VLE/online learning platform	69	7	24
Access to subscription-based educational resources	66	18	16
Personal laptop/computer capable of delivering all types of remote learning support	63	35	2
Audio-visual equipment (e.g. webcam, camera)	38	41	21
Reliable internet connectivity	9	89	2

Source: NFER survey of 1782 teachers: 1435 teachers gave at least one response.

On average, around two-thirds of teachers said that their schools provided them with: a personal laptop or computer (63 per cent); a VLE/online learning platform (69 per cent); and subscription-based educational resources (66 per cent). Around a quarter (24 per cent) of teachers had no access to a VLE, but this was highly phase specific, with 84 per cent of secondary schools providing this resource for their staff and only 66 per cent of primaries doing so. This reflects the pattern of VLE use within schools by phase, as found in our previous survey (Lucas *et al*., 2020). Many primary schools were not using VLEs as a learning resource in May. However, almost all teachers (98 per cent) had reliable personal internet connectivity at home.

Over a third of teachers (35 per cent) were supplying the most basic and essential of resources for remote learning themselves – a laptop or computer. This figure was significantly higher among secondary than primary teachers (46 compared to 32 per cent). This means that almost half of secondary teachers were supplying their own laptop or computer to support both remote learning and their own work.

The majority of teachers said that their schools were not supplying them with audio-visual (AV) equipment, such as a video camera or webcam, to support live or pre-recorded learning (only 38 per cent of schools were doing this). One-fifth of teachers (21 per cent) had no access to AV resources at all, while two-fifths (41 per cent) were supplying their own. The quality of this equipment is unknown. Secondary teachers were more likely than primary teachers to be supplying AV equipment themselves (48 compared to 40 per cent), while primary teachers were more likely to have no access to this resource at all (22 compared to 16 per cent). In addition, staff in the most deprived schools (45 per cent) were significantly more likely than those in the least deprived schools (36 per cent) to be receiving AV equipment from their schools. This is surprising, given that we know from our previous report (Lucas *et al*., 2020) that schools with the highest levels of deprivation were the least likely to be undertaking interactive sessions with pupils. It seems that the lower provision of interactive sessions by teachers in the most deprived schools may be more a reflection of the digital access problems faced by pupils in these schools than by their staff, relative to staff in other schools.

Reasons for the relatively poor provision of remote learning resources for teachers are likely to relate to current financial pressures on schools, which make supplying laptops and AV equipment for all staff a potentially unaffordable expense. Additionally, lockdown in March was sudden, and there was little time for planning or preparing staff for what was ahead. However, Covid-19

is now a more well-known entity, and it is important to anticipate further episodes of local or national lockdown, or of partial school closures. This is the opportune moment to plan for the resource (and training) needs of both school staff and pupils, so that some of the more serious obstacles to remote learning can be overcome in the coming academic year. An important part of this planning will be to ensure that school staff have the hardware they need to support high-quality remote learning from their own homes. Schools are likely to need additional funding to support this.

These findings on remote learning during partial lockdown indicate some interesting patterns. Secondary teachers were more likely to be supplying their own equipment than primary teachers and yet were more likely to be supporting pupils to learn through 'active' teaching. They were also more likely to be receiving training from their schools to support them to do so. In preparing for future episodes of full or partial school closure, there appear to be two key priorities for teachers as part of schools' online learning plans (priorities for pupils are set out in Section 3.5.3).

1. A concerted effort to ensure that all teachers (and especially secondary teachers) have the necessary IT equipment to do their jobs effectively, and to support the kinds of interactive remote learning that has been called for by parents and the press (O'Grady, 2020; Munckton, 2020).

2. School, local authority or trust-level training for teachers on the technology, safeguarding considerations, and pedagogy of remote learning. This is needed for all teachers, but especially for primary teachers. It was clear that a large amount of training had been undertaken in relation to safeguarding, especially in secondary schools. Government also needs to help schools by providing clear, central, guidance on what is, and is not, acceptable from a safeguarding perspective in terms of a live learning offer.

Remote teaching became a feature of teachers' working lives in March 2020, but teachers had virtually no training or preparation for it. We should not assume that all teachers are able to turn their hands to this without the necessary equipment, development or support. As part of the planning for future periods of full or partial school closure, it is important that schools, and those that support them, ensure that teachers are effectively developed, and equipped, to offer high-quality remote learning to their pupils.

3.3.3 Pupil and parent engagement with remote learning

Ensuring that pupils are able to access remote learning support in future is, of course, equally important. In this section we follow up some of the findings from our Wave 1 survey on pupil access to IT resources in the home, and on pupil and parent engagement in remote learning.

As in May, limited pupil access to IT in the home continued to be a key challenge facing schools attempting to engage pupils in remote learning. It was a particular challenge for schools serving the most deprived pupil populations.

According to senior leaders, in July, 28 per cent of their pupils had little to no IT access in the home[35]. As one would expect, this finding was similar to that reported from our Wave 1 survey in May, when senior leaders said that 23 per cent of their pupils had little or no IT access (Lucas *et al*., 2020).

The two survey samples were different, so we should not read too much into an apparent increase in a lack of pupil access to IT in July. However, it is concerning that, despite the Government's promise in April to supply digital devices to care leavers, pupils with social workers and disadvantaged pupils in Year 10 (DfE, 2020f), no apparent progress had been made by July in reducing the problem of IT access at home. The system by which schools had to apply for government-funded devices was fraught with problems and delays, resulting in many pupils not receiving their devices by the end of the summer term (EPI, 2020). The Government's provision of digital support was extremely limited in relation to need, given that a lack of IT access was a problem for pupils across all year groups, not just those in Year 10.

Lack of IT access was also a particular issue for schools with the highest levels of deprivation compared to the most affluent schools (43 compared to 18 per cent – a 25 percentage point difference). Additionally, there was a significant difference between the proportion of primary and secondary pupils with little or no IT access (29 compared to 23 per cent). These findings reinforce the need for IT funding to be directed to disadvantaged pupils and disadvantaged schools, and for consideration to be given to whether or not more IT resource is needed for primary pupils. The Government's announcement of additional IT resources for disadvantaged pupils in Years 3-11 will be welcomed by schools, but this resource will only be available if schools have to close due to a local increase

35 Our definition included pupils with poor broadband access, pupils with little or no IT equipment in the home, and pupils who had to share equipment with other family members.

in Covid-19 infections, or for clinically extremely vulnerable children (see DfE, 2020e). It will be imperative that the supply of digital devices to schools is immediate in such circumstances, if disadvantaged pupils are not to suffer again from a lack of access to remote learning opportunities.

There was no evidence of an improvement in pupil engagement in remote learning, nor in parental engagement, between May and July 2020.

In order to gain an estimate of pupil engagement levels, we repeated a question from our Wave 1 survey in our July survey. This asked teachers to state the percentage of pupils who had returned their last piece of set work. Teachers reported that only just under two-fifths (38 per cent) of pupils had done this. This was slightly lower than the proportion reported in May (42 per cent). The proportion of secondary pupils returning set work in July was very similar to the percentage reported in May (45 compared to 46 per cent), but the proportion of primary-aged pupils returning work, or letting their teachers know what they had been doing, was lower. In May this figure was 41 per cent, whereas in July it was 35 per cent.

As in May, the July results revealed a wide difference in pupil engagement based on disadvantage. The difference between the most and least deprived schools was 20 percentage points (26 compared to 46 per cent); very similar to the difference of 19 percentage points between these schools found in May (Lucas *et al*., 2020).

Our Wave 2 survey was completed in the week before the end of the summer term. It is reasonable to assume that, by this point, 'remote-learning fatigue' may have set in and pupil motivation was waning. Additionally, lockdown was easing at this time, with the range of alternative distractions for pupils increasing. This may have impacted on their willingness and patience to engage in ongoing remote learning.

The fact that primary pupil engagement seems to have dropped more than secondary pupil engagement may also reflect some fatigue on the part of parents – their supervision being such a critical component in the effectiveness of remote learning for primary-aged pupils. Certainly in July, teachers estimated that only just over two-fifths of parents (44 per cent) were fully engaged in supporting their children's remote learning. In May, this figure was estimated at over half (55 per cent). Additionally, the engagement of parents with primary-aged pupils appears to have fallen more than the engagement of parents of secondary-aged pupils. In July, secondary parental engagement was largely unchanged from May (44 compared to 48 per cent).

Finally, as in May, teachers reported significant differences in the level of parental engagement according to the level of disadvantage within the school. The largest was a 22 percentage point difference between parental engagement in the most and least deprived schools (32 compared to 54 per cent). This contrasts with the findings of NFER's analysis of Understanding Society Longitudinal Study data, which showed that the parents of pupils from low income families spent the most amount of time supporting their children's home learning during lockdown (Eivers *et al.*, 2020). These differences are likely to reflect the different perceptions of parents themselves, and teachers, on this issue.

By July, the relaxation of lockdown rules meant that many parents were able to return to work, which may have reduced their capacity to support their children's learning over time. As we discussed in Section 2.2.3, in a remote, or blended, learning model, the importance of parental engagement as a basis for pupil engagement, especially among primary-aged pupils, should not be underestimated. In the event of future periods of remote learning, government and schools will need to give serious consideration to the best methods of retaining both pupil and parent engagement. It seems essential to ensure that, not only do pupils and teachers have the equipment they need to support the most interactive and engaging learning opportunities possible, but that schools work on developing strategies for sharing learning with pupils in ways that also make the commitment manageable for parents.

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Technical appendices

Appendix A: Sample weighting

A note on derived variables

We created free school meals (FSM) quintiles by identifying the proportion of pupils eligible for free school meals in each school. Based on this, we then split schools into five evenly sized groups known as quintiles. We used a similar exercise to generate attainment quintiles.

We created the category of BAME pupils by identifying the share of pupils with Black or Asian ethnicity within a given school. Pupils from mixed backgrounds were not counted as BAME.

A note on sample weighting

To ensure the sample of respondents was representative of the population of all schools, we created a variable that identifies whether a school is a primary or secondary school and its level of FSM eligibility. FSM information was downloaded from the Department for Education's website in April 2020, and the figure identifying the proportion of pupils eligible for FSM was used to separately create eligibility quintiles for both primary and secondary schools. This created a 13-category variable of sector and quintile, including two missing categories and a single category to indicate all-through schools. We compared the distribution of the responding schools to the population distribution and used a chi square test for independence to determine if weighting was required.

Appendix B: Method used to estimate additional costs associated with Covid-19

This appendix sets out our method of estimating the additional costs to schools of opening in September 2020, while social distancing and other measures were in place to reduce the risk of Covid-19 infection. We used the responses of the 78 per cent of senior leaders who thought it was not completely manageable to open their schools while social distancing and other measures were in place as recommended by government (DfE, 2020e) as the basis for our estimates, and used simple averages across all senior leaders who provided a reasonable response[36].

We based the percentages of total expenditure that additional staffing and resources represent on estimates for the average school expenditure of LA-maintained schools. The first step to construct these estimates was to calculate the average teaching staff costs, non-teaching staff costs and all other costs for an average LA-maintained primary and secondary school. We constructed these using the consistent financial reporting (CFR) returns for LA-maintained schools in the 2018/19 financial year (April to March). We then constructed averages based on primary and secondary schools (i.e. excluding pupil referral units, special, and nursery schools). Only schools which supplied a full 12-month financial return to the DfE were included in the analysis.

The second step involved in constructing these estimates was to project 2018/19 expenditures into anticipated expenditures for 2020/21. We did this separately for average teaching staff costs, non-teaching costs, and all other costs based on the following assumptions.

- Teaching staff costs were projected to increase by 2.75 per cent in 2019/20 and 3.1 per cent in 2020/21, reflecting average increases in teacher salaries based on average pay rises (DfE, 2019e; 2020h).
- Non-teaching staff costs were projected to increase by 3.3 per cent in 2019/20 and 2.5 per cent in 2020/21 (DfE, 2019c)[37].
- Schools' other costs were projected to increase by 1.9 per cent in 2019/20 and 2.0 per cent in 2020/21 based on inflationary projections (HM Treasury, 2020).

We then constructed our estimate for total annual expenditure in 2020/21 by combining the individual forecasts for teaching staff costs, non-teaching staff costs and other costs.

The third step involved constructing estimates for the costs associated with additional staffing requirements. For teachers, we based the cost associated with employing an additional teacher on the salary of a newly qualified teacher, including the associated pension and national insurance contributions. This

36 Responses were considered in relation to the size of the school and extreme outliers were removed.

37 The estimate from 2019/20 is based on a reported value and the estimate for 2020/21 is an average, based on increases in non-teaching staff costs between 2017/18 (1.2 per cent), 2018/19 (3.1 per cent) and 2019/20 (3.3 per cent).

represents the lower bound associated with hiring an additional teacher. For TAs, cleaning staff and other support staff, given that there is variation in the salaries paid across the sector and that many support staff are employed on term-only or part-time contracts, we used the full-time equivalent (FTE) salary of an individual earning the national minimum wage to approximate salary costs. We have not accounted for pension or employer national insurance contributions for these staff, due to the variation in contract types across schools. As a result, this represents a lower bound estimate for the costs associated with employing TAs, cleaning staff and other support staff.

Finally, we combined all of these estimates to calculate the percentages of total expenditure accounted for by additional staffing and resource needs. These comparisons are intended to be indicative only, as there are substantial differences between schools which are not captured by estimates based on an 'average school'. In addition, estimates for additional staffing and resource needs were only provided by senior leaders who thought it was not completely manageable to open their schools. Among those senior leaders, there was a high level of non-response which may bias estimates.

Appendix C: Regression models

We estimated a statistical model, using a weighted Ordered Logit regression, to examine the association between different variables and how far teachers reported their pupils are behind, compared to where they would normally expect them to be at this time of year. We measured the extent to which pupils are behind compared to where teachers would normally expect them to be at this time of year, over and above other factors, based on a seven-point scale of responses to the question: 'On average, how far behind are your pupils compared to where you would normally expect them to be at this time of year?'. Due to small sample sizes, for the purposes of regression modelling, we combined both the two responses at the bottom of the scale ('Not behind at all' and 'One month behind') and the two responses at the top of the scle ('Five months behind'' and 'Six months or more behind') to create a five-point scale.

Our modelling accounted for:

- school characteristics (Ofsted rating, phase, attainment quintile, FSM quintile, region, school phase, percentage of school pupils who are Black, Asian or from a Minority Ethnic (BAME) group, whether the school was urban or rural, whether the school was an academy
- teacher characteristics (age group, gender)
- pupil and parent engagement
- teachers' approaches to catch up
- CPD provided to teachers by the school
- whether the school is currently open
- whether the teacher is providing remote learning and teaching pupils he/she would normally teach
- the most recent learning activity set by the teacher.

A number of independent variables had a substantial number of missing cases. These were:

- pupil and parent engagement
- teachers' approaches to catch up
- CPD provided to teachers by the school

The challenge is that only including non-missing values leads to large sample attrition, but there were too many missing values for these variables to simply impute them.

For this reason, we ran two estimations for our model:

- Preferred model: model based only on the independent variables with limited numbers of missing observations
- Extended model: extends the preferred model to also include independent variables with large numbers of missing observations.

As the findings from our preferred model were more robust, we used these to inform our analysis in the first instance. We used findings from our extended model to draw conclusions about the independent variables, with limited observations. These results should be treated with caution as they have a lower relative power and will be biased towards the respondents who provided responses.

Tables 5 and 6 show all the variables that were included in the final preferred and extended models. Answers to other questions in the survey that were not significant in the model were removed one at a time, until all remaining survey variables were related to the outcome. Interactions between a number of school characteristics were also tested for inclusion.

Table 5: Preferred model of factors related to how far teachers reported their pupils are behind compared to where they would normally expect them to be

Variable		Log odds		Odds ratio	
		Coefficient	Standard error	Coefficient	Standard error
Ofsted Rating 2019	Outstanding	0.167	(0.179)	1.182	(0.211)
	Requires improvement or inadequate	0.074	(0.191)	1.077	(0.205)
Attainment Quintiles	Lowest 20%	0.531**	(0.208)	1.700**	(0.353)
	2nd Lowest 20%	-0.173	(0.213)	0.841	(0.179)
	2nd Highest 20%	-0.298	(0.192)	0.742	(0.142)
	Highest 20%	-0.206	(0.221)	0.814	(0.180)
Free School Meal Quintiles	Lowest 20%	-0.865***	(0.215)	0.421***	(0.090)
	2nd Lowest 20%	-0.094	(0.217)	0.911	(0.198)
	2nd Highest 20%	0.009	(0.197)	1.009	(0.198)
	Highest 20%	0.738***	(0.217)	2.091***	(0.454)
Region	East Midlands	0.082	(0.250)	1.086	(0.272)
	East of England	0.160	(0.228)	1.174	(0.268)
	North East	0.427	(0.358)	1.533	(0.549)
	North West	0.479**	(0.240)	1.615**	(0.388)
	South East	0.136	(0.231)	1.146	(0.265)
	South West	0.250	(0.277)	1.285	(0.356)
	West Midlands	0.396	(0.272)	1.487	(0.404)
	Yorkshire and the Humber	0.443	(0.305)	1.557	(0.475)
Age group	20 - 29 years	-0.425*	(0.230)	0.654*	(0.150)
	30 - 39 years	0.395**	(0.168)	1.485**	(0.249)
	50 - 59 years	0.249	(0.164)	1.282	(0.211)
	60 + years	-0.196	(0.301)	0.822	(0.247)

Variable		Log odds		Odds ratio	
		Coefficient	Standard error	Coefficient	Standard error
School phase	Secondary	-0.773***	(0.133)	0.462***	(0.061)
Access to VLE	Yes, provided by myself	0.352	(0.272)	1.422	(0.387)
	No, I do not have this resource	-0.075	(0.188)	0.928	(0.175)
Access to subscription-based educational resources	Yes, provided by myself	0.065	(0.185)	1.067	(0.197)
	No, I do not have this resource	0.287	(0.193)	1.332	(0.257)
Are you, personally, continuing to provide remote learning for any of your pupils?	Yes	0.684	(0.703)	1.982	(1.393)
Most recent learning activity	Undertake coursework	0.401*	(0.240)	1.493*	(0.358)
	Work collaboratively	-0.604***	(0.222)	0.547***	(0.121)
Training	My school has not provided training	0.346**	(0.172)	1.413**	(0.243)
	I do not feel that I need training to provide remote learning support	0.633***	(0.215)	1.884***	(0.405)
Thinking now about the teaching that you are carrying out in school, which of the following statements is true for you?	I am solely teaching pupils that I normally teach	-0.299	(0.194)	0.742	(0.144)
	I am mainly teaching pupils that I normally teach	0.271	(0.193)	1.311	(0.253)
	I am solely teaching pupils that I do not normally teach	0.055	(0.198)	1.056	(0.209)

Variable		Log odds		Odds ratio	
		Coefficient	Standard error	Coefficient	Standard error
Do you feel that you are able to teach to your usual standard in the current environment?	No	0.444***	(0.168)	1.558***	(0.262)
	Not sure	0.448	(0.430)	1.565	(0.672)

1 Based on NFER survey of 1782 teachers: 1557 are included in the model.

2 Reference groups are teachers in the following types of schools: Ofsted = Good, Attainment = Middle Quintile, FSM = Middle Quintile, Region = London, Phase = Primary, Age = 40-49.

3 Reference group for ‘access to VLE’ and ‘subscription-based educational resource’s is teachers who had access provided by their schools.

4 Reference for ‘teaching activity’ is teachers who are ‘mainly teaching pupils that I do not normally teach’.

5 Reference for ‘ability to teach at usual standard’ is teachers who agreed that they were able to teach at their usual standard.

6 Where appropriate, missing data was taken into consideration through the use of dummy variables.

7 *** denotes significance at 1% level, ** denotes significance at 5% level and * denotes significance at 10% level.

Table 6: Extended model of factors related to how far teachers reported their pupils are behind compared to where they would normally expect them to be

Variable		Log odds		Odds ratio	
		Coefficient	Standard error	Coefficient	Standard error
Ofsted Rating 2019	Outstanding	0.173	(0.214)	1.189	(0.255)
	Requires improvement or inadequate	-0.026	(0.221)	0.974	(0.216)
Attainment Quintiles	Lowest 20%	0.913***	(0.244)	2.493***	(0.608)
	2nd Lowest 20%	-0.168	(0.267)	0.845	(0.226)
	2nd Highest 20%	-0.183	(0.229)	0.833	(0.191)
	Highest 20%	0.076	(0.260)	1.079	(0.281)
Free School Meal Quintiles	Lowest 20%	-0.822***	(0.273)	0.440***	(0.120)
	2nd Lowest 20%	-0.015	(0.252)	0.986	(0.249)
	2nd Highest 20%	-0.137	(0.243)	0.872	(0.212)
	Highest 20%	0.442	(0.273)	1.555	(0.424)
Region	East Midlands	0.119	(0.283)	1.127	(0.319)
	East of England	0.048	(0.272)	1.049	(0.286)
	North East	0.224	(0.415)	1.251	(0.519)
	North West	0.440*	(0.266)	1.552*	(0.413)
	South East	0.162	(0.259)	1.176	(0.305)
	South West	0.200	(0.315)	1.221	(0.384)
	West Midlands	0.570*	(0.334)	1.768*	(0.591)
	Yorkshire and the Humber	0.691*	(0.368)	1.995*	(0.733)
Age group	20 - 29 years	-0.456*	(0.255)	0.634*	(0.161)
	30 - 39 years	0.438**	(0.202)	1.550**	(0.313)
	50 - 59 years	0.255	(0.205)	1.291	(0.265)
	60 + years	-0.714**	(0.325)	0.490**	(0.159)

Variable		Log odds		Odds ratio	
		Coefficient	Standard error	Coefficient	Standard error
School phase	Secondary	-0.784***	(0.152)	0.456***	(0.069)
Access to VLE	Yes, provided by myself	0.424	(0.301)	1.528	(0.460)
	No, I do not have this resource	0.061	(0.204)	1.062	(0.216)
Access to subscription-based educational resources	Yes, provided by myself	0.005	(0.209)	1.005	(0.210)
	No, I do not have this resource	0.357*	(0.206)	1.429*	(0.295)
Most recent learning activity	Undertake coursework	0.639**	(0.288)	1.894**	(0.545)
	Work collaboratively	-0.564**	(0.237)	0.569**	(0.135)
Training	My school has not provided training	0.299	(0.183)	1.348	(0.247)
	I do not feel that I need training to provide remote learning support	0.512**	(0.232)	1.669**	(0.387)
Thinking now about the teaching that you are carrying out in school, which of the following statements is true for you?	I am solely teaching pupils that I normally teach	-0.171	(0.241)	0.843	(0.203)
	I am mainly teaching pupils that I normally teach	0.310	(0.240)	1.364	(0.327)
	I am solely teaching pupils that I do not normally teach	0.074	(0.236)	1.077	(0.255)

Variable		Log odds		Odds ratio	
		Coefficient	Standard error	Coefficient	Standard error
Do you feel that you are able to teach to your usual standard in the current environment?	No	0.430**	(0.205)	1.537**	(0.316)
	Not sure	0.348	(0.559)	1.417	(0.792)
Engagement	Parent/carer engagement	-0.545***	(0.084)	0.580***	(0.049)

1 Based on NFER survey of 1782 teachers: 1109 are included in the model.

2 Reference groups are teachers in the following types of schools: Ofsted = Good, Attainment = Middle Quintile, FSM = Middle Quintile, Region = London, Phase = Primary, Age = 40-49.

3 Reference group for ‘access to VLE’ and ‘subscription-based educational resources’ is teachers who had access provided by their schools.

4 Reference for ‘teaching activity’ is teachers who are ‘mainly teaching pupils that I do not normally teach’.

5 Reference for ‘ability to teach at usual standard’ is teachers who agreed that they were able to teach at their usual standard.

6 Where appropriate, missing data was taken into consideration through the use of dummy variables. The significant ones are not included but are as follows: whether teacher felt able to teach at their usual standard.

7 *** denotes significance at 1% level, ** denotes significance at 5% level and * denotes significance at 10% level.

We estimated a statistical model, using a weighted Ordinary Least Squares (OLS) regression, to examine the association between different variables and need for intensive catch-up support. We measured pupils’ need for intensive catch-up support by the share of pupils reported by teachers as requiring intensive catch-up support.

The independent variables were the same as in the previous model. As before, we estimated both a preferred and extended model. We used the findings from the preferred model to inform our analysis in the first instance, and results from the extended model to draw conclusions about the independent variables, with limited observations.

Table 7 and Table 8 show all the variables that were included in the final preferred and extended models. We removed answers to other questions in the survey that were not significant in the model one at a time, until all remaining survey variables were related to the outcome.

Table 7: Preferred model of factors related to share of pupils requiring intensive catch-up support

Variable		Coefficient	Standard error	Standardised coefficient
Ofsted Rating 2019	Outstanding	3.218	(2.377)	0.05
	Requires improvement or inadequate	0.138	(2.416)	0.00
Attainment Quintiles	Lowest 20%	10.978***	(2.621)	0.18
	2nd Lowest 20%	-1.612	(2.652)	-0.02
	2nd Highest 20%	-1.476	(2.329)	-0.02
	Highest 20%	-0.269	(2.819)	0.00
Free School Meal Quintiles	Lowest 20%	-9.213***	(2.834)	-0.15
	2nd Lowest 20%	2.008	(2.599)	0.02
	2nd Highest 20%	2.394	(2.613)	0.04
	Highest 20%	8.102***	(2.941)	0.12
Region	East Midlands	-1.398	(3.546)	-0.02
	East of England	-1.947	(3.183)	-0.03
	North East	1.917	(4.637)	0.02
	North West	4.084	(3.249)	0.06
	South East	-0.307	(3.214)	0.00
	South West	-2.647	(3.680)	-0.03
	West Midlands	5.109	(4.151)	0.05
	Yorkshire and the Humber	3.167	(3.723)	0.03
Age group	20 - 29 years	-0.963	(2.617)	0.00
	30 - 39 years	3.577*	(2.073)	0.06
	50 - 59 years	4.258*	(2.184)	0.07
	60 + years	6.524	(4.192)	0.05
School phase	Secondary	9.434***	(2.438)	0.14
	Academy	2.903	(2.268)	0.06
Ethnicity	Per cent of BAME pupils	3.012***	(1.126)	0.12

Variable		Coefficient	Standard error	Standardised coefficient
Interactions	Interaction between BAME and secondary	-6.506**	(3.068)	-0.09
	Interaction between BAME and academy	-2.443	(1.843)	-0.06
Are you, personally, continuing to provide remote learning for any of your pupils? = 1, Yes	Yes	-7.015	(5.897)	-0.10
Most recent learning activity	Listen to/watch you or another teacher present content in a live session	7.782***	(2.580)	0.11
	Listen to/watch you or another teacher present content in a pre-recorded session	3.159*	(1.703)	0.06
	Undertake coursework	5.978**	(2.731)	0.05
	Learn about strategies for managing their own learning	-5.574**	(2.700)	-0.05
Training	How to use specific software/websites	-3.448*	(1.838)	-0.07
Access to VLE	Yes, provided by myself	6.859*	(3.529)	0.06
	No, I do not have access	2.413	(2.408)	0.04
Access to subscription	Yes, provided by myself	4.167*	(2.295)	0.06
	No, I do not have access	4.456**	(2.138)	0.06
Is your school currently open to any year groups apart from vulnerable pupils and keyworker children?	Yes	7.378*	(4.170)	0.07

Variable		Coefficient	Standard error	Standardised coefficient
Thinking now about the teaching that you are carrying out in school, which of the following statements is true for you?	I am solely teaching pupils that I normally teach	-3.503	(2.349)	-0.06
	I am mainly teaching pupils that I normally teach	3.140	(2.195)	0.05
	I am solely teaching pupils that I do not normally teach	2.360	(2.765)	0.03
Do you feel that you are able to teach to your usual standard in the current environment?	No	5.032**	(2.174)	0.10
	Not sure	-4.695	(3.776)	-0.03
Constant		28.914***	(8.803)	-

1 Based on NFER survey of 1782 teachers: 1409 are included in the model. The R-squared of the model was 0.22.

2 Reference groups are teachers in the following types of schools: Ofsted = Good, Attainment = Middle Quintile, FSM = Middle Quintile, Region = London, Phase = Primary, Age = 40-49.

3 Reference group for ‘access to VLE’ and ‘subscription-based educational resources’ is teachers who had access provided by their schools.

4 Reference for ‘teaching activity’ is teachers who are ‘mainly teaching pupils that I do not normally teach’.

5 Reference for ‘ability to teach at usual standard’ is teachers who agreed that they were able to teach at their usual standard.

6 Unstandardised coefficients measure the amount that pupil engagement changes when each variable is changed by one unit, while holding all other variables constant. Standardised coefficients measure the amount that pupil engagement changes when each variable is changed by one standard deviation, while holding all other variables constant.

7 Where appropriate, missing data was taken into consideration through the use of dummy variables. The significant ones are not included but are as follows: whether teacher felt able to teach at their usual standard.

8 *** denotes significance at 1% level, ** denotes significance at 5% level and * denotes significance at 10% level.

Table 8: Extended model of factors related to share of pupils requiring intensive catch-up support

Variable		Coefficient	Standard error	Standardised coefficient
Ofsted Rating 2019	Outstanding	-0.774	(2.511)	-0.01
	Requires improvement or inadequate	-2.310	(2.705)	-0.03
Attainment Quintiles	Lowest 20%	12.545***	(2.932)	0.21
	2nd Lowest 20%	-4.745	(3.314)	-0.07
	2nd Highest 20%	-1.081	(2.788)	-0.02
	Highest 20%	4.323	(3.242)	0.07
Free School Meal Quintiles	Lowest 20%	-6.595**	(3.177)	-0.11
	2nd Lowest 20%	1.280	(2.924)	0.02
	2nd Highest 20%	1.536	(2.974)	0.02
	Highest 20%	5.996*	(3.478)	0.09
Region	East Midlands	1.210	(3.962)	0.02
	East of England	-0.286	(3.550)	-0.00
	North East	3.063	(4.940)	0.03
	North West	6.357*	(3.558)	0.09
	South East	5.829	(3.656)	0.09
	South West	-1.893	(4.057)	-0.02
	West Midlands	8.320	(6.296)	0.08
	Yorkshire and the Humber	4.711	(3.841)	0.05

Variable		Coefficient	Standard error	Standardised coefficient
Age group	20 - 29 years	-0.161	(2.973)	-0.00
	30 - 39 years	5.085**	(2.378)	0.09
	50 - 59 years	7.380***	(2.614)	0.12
	60 + years	9.363	(6.656)	0.07
School phase	Secondary	12.144***	(3.148)	0.18
	Academy	4.307*	(2.547)	0.09
Ethnicity	Per cent of BAME pupils	2.767**	(1.316)	0.11
Interactions	Interaction between ethnicity and secondary	-7.945**	(3.905)	-0.10
	Interaction between ethnicity and academy	-1.780	(2.293)	-0.04
Most recent learning activity	Listen to/watch you or another teacher present content in a live session	8.871***	(2.935)	0.12
	Listen to/watch you or another teacher present content in a pre-recorded session	2.724	(1.924)	0.05
	Undertake coursework	4.836	(3.520)	0.04
	Learn about strategies for managing their own learning	-2.372	(2.916)	-0.02
Training	How to use specific software/ websites	-1.775	(1.988)	-0.04
Access to VLE	Yes, provided by myself	5.989	(4.301)	0.06
	No, I do not have access	2.795	(2.529)	0.05

Variable		Coefficient	Standard error	Standardised coefficient
Access to subscription	Yes, provided by myself	3.681	(2.420)	0.06
	No, I do not have access	4.421*	(2.409)	0.06
Thinking now about the teaching that you are carrying out in school, which of the following statements is true for you?	I am solely teaching pupils that I normally teach	-2.392	(2.515)	-0.04
	I am mainly teaching pupils that I normally teach	2.208	(2.262)	0.04
	I am solely teaching pupils that I do not normally teach	2.404	(2.988)	0.04
Do you feel that you are able to teach to your usual standard in the current environment?	No	3.370	(2.348)	0.06
	Not sure	-2.215	(3.988)	-0.02
Gaps in curriculum learning	Providing them with feedback about how to improve	-5.778***	(1.798)	-0.12
Catch up	Other activities	-12.989**	(5.452)	-0.10
Engagement	Parent/carer engagement	-5.198***	(0.941)	-0.22
Constant		28.100***	(4.961)	-

1 Based on NFER survey of 1782 teachers: 770 are included in the model. The R-squared of the model was 0.35.

2 Reference groups are teachers in the following types of schools: Ofsted = Good, Attainment = Middle Quintile, FSM = Middle Quintile, Region = London, Phase = Primary, Age = 40-49.

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8 *** denotes significance at 1% level, ** denotes significance at 5% level and * denotes significance at 10% level.

Published in September 2020
By the National Foundation for Educational Research,
The Mere, Upton Park, Slough, Berkshire SL1 2DQ
www.nfer.ac.uk

Registered Charity No. 313392

ISBN: 978-1-912596-10-2

How to cite this publication:
Sharp, C., Nelson. J., Lucas. M., Julius, J., McCrone. T. and Sims, D. (2020). Schools' responses to Covid-19: The challenges facing schools and pupils in September 2020. Slough: NFER.

NFER
National Foundation for Educational Research

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Educational Research
Milestone House, The Mere
Upton Park, Slough SL1 2DQ

September 2020

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